Analytical Data Package Prepared For

Fluor Handord

Radiochemical Analysis By

STL Richland STLRL

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Data Package Contains _____ Pages

Report Nbr: 35704

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05172	I07-027	B1M6K6	J7E040299-1	JWA5N1AA	9JWA5N10	7129613
	S07-004	B1MRD9	J7E040306-1	JWA581AA	9JWA5810	7129620
		B1MRD9	J7E040306-1	JWA581AC	9JWA5810	7129617
		B1MRD9	J7E040306-1	JWA581AD	9JWA5810	7129618
		B1MRD9	J7E040306-1	JWA581AE	9JWA5810	7129613
	W07-005	B1N4J6	J7E040342-1	JWCG11AA	9JWCG110	7129619
		B1N4J6	J7E040342-1	JWCG11AD	9JWCG110	7129616
		B1N4J6	J7E040342-1	JWCG12AC	9JWCG120	7171388
		B1N4L5	J7E040342-2	JWCHW1A	9JWCHW10	7129620
		B1N4L5	J7E040342-2	JWCHW1A	9JWCHW10	7129619
		B1N4L5	J7E040342-2	JWCHW1AE	9JWCHW10	7129616
		B1N4L5	J7E040342-2	JWCHW2A	9JWCHW20	7171388
		B1N4M0	J7E040342-3	JWCJC1AA	9JWCJC10	7129620
		B1N4M0	J7E040342-3	JWCJC1AC	9JWCJC10	7129619
		B1N4M0	J7E040342-3	JWCJC1AE	9JWCJC10	7129616

Comments:

Report Nbr: 35704

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05172	W07-005	B1N4M0	J7E040342-3	JWCJC1AF	9JWCJC10	7129612
		B1N4M5	J7E040342-4	JWCJM1AA	9JWCJM10	7129620
		B1N4M5	J7E040342-4	JWCJM1AC	9JWCJM10	7129619
		B1N4M5	J7E040342-4	JWCJM1AE	9JWCJM10	7129616
		B1N4M5	J7E040342-4	JWCJM2AD	9JWCJM20	7171388
		B1N4K1	J7E070107-1	JWEPC1AA	9JWEPC10	7129620
		B1N4K1	J7E070107-1	JWEPC1AC	9JWEPC10	7129618
		B1N4K1	J7E070107-1	JWEPC1AE	9JWEPC10	7129612
		B1N4K1	J7E070107-1	JWEPC1AF	9JWEPC10	7129616
		B1N4K5	J7E070107-2	JWEPG1AA	9JWEPG10	7129620
		B1N4K5	J7E070107-2	JWEPG1AC	9JWEPG10	7129612
		B1N4K5	J7E070107-2	JWEPG1AD	9JWEPG10	7129616
		B1N4K6	J7E070107-3	JWEPK1AA	9JWEPK10	7129620
		B1N4K6	J7E070107-3	JWEPK1AC	9JWEPK10	7129612
		B1N4K6	J7E070107-3	JWEPK1AD	9JWEPK10	7129616
		B1N4R9	J7E070107-4	JWEPP1AA	9JWEPP10	7129620
		B1N4R9	J7E070107-4	JWEPP1AC	9JWEPP10	7129612
		B1N4R9	J7E070107-4	JWEPP1AD	9JWEPP10	7129616
		B1N4T4	J7E070107-5	JWEPQ1AA	9JWEPQ10	7129620
		B1N4T4	J7E070107-5	JWEPQ1AC	9JWEPQ10	7129617
		B1N4T4	J7E070107-5	JWEPQ1AD	9JWEPQ10	7129618
		B1N4T4	J7E070107-5	JWEPQ1AE	9JWEPQ10	7129612
		B1N4T4	J7E070107-5	JWEPQ1AF	9JWEPQ10	7129616
		B1N4T6	J7E070107-6	JWEPW1AA	9JWEPW10	7129620
		B1N4T6	J7E070107-6	JWEPW1AE	9JWEPW10	7129616
		B1N4T6	J7E070107-6	JWEPW2AD	9JWEPW20	7171388

Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05172	W07-005	B1N541	J7E070107-7	JWFA81AA	9JWFA810	7129617
		B1N541	J7E070107-7	JWFA81AC	9JWFA810	7129618
	S07-003	B1MF90	J7E070109-1	JWEP11AA	9JWEP110	7129621
		B1MDN5	J7E070109-2	JWEP51AA	9JWEP510	7129617
		B1MDN5	J7E070109-2	JWEP51AC	9JWEP510	7129618
		B1MDN5	J7E070109-2	JWEP51AD	9JWEP510	7129616
		B1MDN7	J7E070109-3	JWEP61AA	9JWEP610	7129617
		B1MDN7	J7E070109-3	JWEP61AC	9JWEP610	7129618
		B1MDN7	J7E070109-3	JWEP61AD	9JWEP610	7129616
		B1MDN8	J7E070109-4	JWEP81AA	9JWEP810	7129617
		B1MDN8	J7E070109-4	JWEP81AC	9JWEP810	7129618
		B1MDN8	J7E070109-4	JWEP81AD	9JWEP810	7129616
	S07-004	B1MRM5	J7E070112-1	JWEQK1AA	9JWEQK10	7129620
		B1MRM5	J7E070112-1	JWEQK1AC	9JWEQK10	7129613
	I07-044	B1N357	J7E080312-1	JWH5W1AA	9JWH5W10	7129613
		B1N357	J7E080312-1	JWH5W2AC	9JWH5W20	7171388
	S07-005	B1N3Y1	J7E080313-1	JWH501AA	9JWH5010	7129620
		B1N3Y1	J7E080313-1	JWH501AC	9JWH5010	7129613
		B1N3Y1	J7E080313-1	JWH501AD	9JWH5010	7129616

Comments:

SEVERN TRENT STL

STL Richland
2800 George Washington Way
Richland, WA 99354

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www.stl-inc.com

Certificate of Analysis

Fluor Hanford
1200 Jadwin Ave.
Richland, WA 99352

June 25, 2007

Attention: Steve Trent

SAF Number	:	I07-027, W07-005, S07-003, S07-004, I07-044, S07-005
Date SDG Closed	:	May 7, 2007
Number of Samples	:	Nineteen (19)
Sample Type	:	Water
SDG Number	:	W05172
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between May 3, 2007and May 7, 2007 nineteen water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

PGW ID#	STLR ID#	DATE OF RECEIPT	MATRIX
B1M6K6	JWA5N	5/03/07	WATER
B1N4J6	JWCD1	5/03/07	WATER
B1N4L5	JWCHW	5/03/07	WATER
B1N4M0	JWCJC	5/03/07	WATER
B1N4M5	JWCJM	5/03/07	WATER
B1N4K1	JWEPC	5/04/07	WATER
B1N4K5	JWEPG	5/04/07	WATER
B1N4K6	JWEPK	5/04/07	WATER
B1N4R9	JWEPD	5/04/07	WATER
B1N4T4	JWEPQ	5/04/07	WATER
B1N541	JWFA8	5/04/07	WATER
B1N4T6	JWEPW	5/04/07	WATER
B1MF90	JWEP1	5/04/07	WATER

B1MDN5	JWEP5	5/04/07	WATER
B1MDN7	JWEP6	5/04/07	WATER
B1MDN8	JWEP8	5/04/07	WATER
B1MRM5	JWEQK	5/04/07	WATER
B1N357	JWH5W	5/07/07	WATER
B1N3Y1	JWH50	5/07/07	WATER

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Gas Proportional Counting
Gross Alpha by method RICH-RC-5014
Gross Beta by method RICH-RC-5014
Gamma Spectroscopy
Gamma Spec (LL) by method RICH-RC-5017
Iodine-129 (LL) by method RICH-RC-5025
Liquid Scintillation Counting
Enriched Tritium by method RICH-RC-5024
Technetium-99 by TEVA method RICH-RC-5065
Technetium-99 by method RICH-RC-5078
Tritium by method RICH-RC-5007
Laser Induced Phosphorimetry
Total Uranium by method RICH-RC-5058

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:
The volume was reduced on sample B1N4T4 based on the elevated screen result. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MDN5) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:
Reduced volumes were analyzed based on an elevated screen results for samples B1MDN7, B1N4K1 and B1MDN7. Sample B1N4K1 does not meet the CRDL, however the sample result exceeds the MDA. Except as noted, the LCS, batch blank, samples and sample duplicate (B1MDN7) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:
The LCS, batch blank, samples and sample duplicate (B1N4J6) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:
The LCS, batch blank, samples and sample duplicate (B1M6K6) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:
The LCS, batch blank, samples, sample duplicate (B1D2J2), and sample matrix spike (B1D2J9) results are within contractual requirements.

Technetium-99 by method RICH-RC-5078:
The original counts of this Tc99 batch the TSIE was out and the batch could not be calculated. The samples were shaken, rewiped and recounted. The batch was recounted and the TSIE was still out. After consideration by the QA Manager and the Technical Director, the decision was made to extend the upper limits of the curve to 480. The samples were ale to be calculated acceptable. Except as notLCS, batch blank, samples, sample duplicate (B1N357), and sample matrix spike (B1N4T6) results are within contractual requirements.

Tritium by method RICH-RC-5007:
The LCS, batch blank, samples and sample duplicate (B1N4K6) results are within contractual requirements.

Enriched Tritium by method RICH-RC-5024
The LCS, batch blank, samples and sample duplicate (B1MF90) results are within contractual requirements.

Pacific Northwest National Laboratories
June 25, 2007

Total Uranium

Total Uranium by method RICH-RC-5058:

The LCS, batch blank, samples, sample duplicate (B1N3Y1), and sample matrix spike (B1MDN5) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:

Sandra Segen

for Sherryl A. Adam
Project Manager

Drinking Water Method Cross References

	DRINKING WATER ASTM METHOD CROSS REFERENCES	
Referenced Method	**Isotope(s)**	**STL Richland's SOP number**
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, R = constants * f(x,y,z,...). The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/vn), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation (Result/Expected)-1 as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) ***u_c - Combined Uncertainty.***	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, *u_c the combined uncertainty*. The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval, 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. Lc=(1.645 * Sqrt(2*(BkgrndCnt/BkgrndCntMin)/SCntMin)) * (ConvFct/(Eff*Yld*Abn*Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC|MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. MDC = (4.65 * Sqrt((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin) * (ConvFct/(Eff * Yld * Abn * Vol) * IngrFct). For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the **Work Order** Number.
RER	The equation Replicate Error Ratio = (S-D)/[sqrt($TPUs^2 + TPUd^2$)] as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUd is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35704 File Name: h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWA5810	B1MRD9		MW6-SBB-A1	S07-004	W05172					05/03/2007 08:46

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	8.38E+03	pCi/L	3.2E+02	4.7E+02		2.98E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/16/2007 10:33	I
7129617	ALPHA	12587-46-1	2.67E+00	pCi/L	1.6E+00	1.7E+00		1.70E+00	100.0	9310_ALPHABETA	1.995E-01	L	06/18/2007 19:55	I
7129618	BETA	12587-47-2	7.14E+00	pCi/L	1.8E+00	2.2E+00		2.85E+00	100.0	9310_ALPHABETA	1.981E-01	L	06/18/2007 17:36	I
7129613	I-129L	15046-84-1	1.66E+00	pCi/L	3.9E-01	3.9E-01	U	6.61E-01	96.5	I129LL_SEP_LEPS	3.9349E+00	L	06/15/2007 12:20	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWA5N10	B1M6K6		MW6-SBB-A1	I07-027	W05172					05/03/2007 11:27

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129613	I-129L	15046-84-1	2.08E+00	pCi/L	4.5E-01	4.5E-01		3.31E-01	96.5	I129LL_SEP_LEPS	3.9053E+00	L	06/15/2007 12:18	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWCG110	B1N4J6		MW6-SBB-A1	W07-005	W05172					05/03/2007 12:13

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129619	BE-7	13966-02-4	-1.37E+01	pCi/L	4.0E+01	4.0E+01	U	6.75E+01		GAMMALL_GS	1.9921E+00	L	06/20/2007 17:02	I
7129619	CO-60	10198-40-0	4.76E+01	pCi/L	1.0E+01	1.0E+01		5.14E+00		GAMMALL_GS	1.9921E+00	L	06/20/2007 17:02	I
7129619	CS-134	13967-70-9	3.18E-01	pCi/L	3.2E+00	3.2E+00	U	5.88E+00		GAMMALL_GS	1.9921E+00	L	06/20/2007 17:02	I
7129619	CS-137	10045-97-3	6.86E-01	pCi/L	3.1E+00	3.1E+00	U	5.74E+00		GAMMALL_GS	1.9921E+00	L	06/20/2007 17:02	I
7129619	EU-152	14683-23-9	2.66E+00	pCi/L	6.3E+00	6.3E+00	U	1.18E+01		GAMMALL_GS	1.9921E+00	L	06/20/2007 17:02	I
7129619	EU-154	15585-10-1	-2.08E-01	pCi/L	5.9E+00	5.9E+00	U	1.16E+01		GAMMALL_GS	1.9921E+00	L	06/20/2007 17:02	I
7129619	EU-155	14391-16-3	-2.59E+00	pCi/L	5.2E+00	5.2E+00	U	8.86E+00		GAMMALL_GS	1.9921E+00	L	06/20/2007 17:02	I
7129619	K-40	13966-00-2	1.40E+01	pCi/L	6.2E+01	6.2E+01	U	1.38E+02		GAMMALL_GS	1.9921E+00	L	06/20/2007 17:02	I
7129619	RU-106	13967-48-1	-6.03E+00	pCi/L	2.8E+01	2.8E+01	U	4.91E+01		GAMMALL_GS	1.9921E+00	L	06/20/2007 17:02	I
7129619	SB-125	14234-35-6	-3.78E+00	pCi/L	6.9E+00	6.9E+00	U	1.16E+01		GAMMALL_GS	1.9921E+00	L	06/20/2007 17:02	I
7129616	Uranium	7440-61-1	3.65E+01	ug/L	4.3E+00	4.3E+00		7.79E-02		UTOT_KPA	2.69E-02	ML	06/19/2007 14:31	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWCG120	B1N4J6		MW6-SBB-A1	W07-005	W05172					05/03/2007 12:13

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7171388	TC-99	14133-76-7	2.14E+04	pCi/L	9.6E+01	1.3E+03		1.27E+01	100.0	TC99_ETVDSK_LS	1.257E-01	L	06/20/2007 21:00	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35704 File Name: h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWCHW10	B1N4L5		MW6-SBB-A1	W07-005	W05172					05/03/2007 09:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	3.31E+04	pCi/L	6.0E+02	1.4E+03		2.97E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/16/2007 11:55	I
7129619	BE-7	13966-02-4	9.14E+00	pCi/L	3.5E+01	3.5E+01	U	6.51E+01		GAMMALL_GS	1.997E+00	L	06/20/2007 19:02	I
7129619	CO-60	10198-40-0	2.06E+01	pCi/L	6.9E+00	6.9E+00		4.33E+00		GAMMALL_GS	1.997E+00	L	06/20/2007 19:02	I
7129619	CS-134	13967-70-9	2.40E-01	pCi/L	2.7E+00	2.7E+00	U	5.08E+00		GAMMALL_GS	1.997E+00	L	06/20/2007 19:02	I
7129619	CS-137	10045-97-3	-2.26E-01	pCi/L	3.0E+00	3.0E+00	U	5.29E+00		GAMMALL_GS	1.997E+00	L	06/20/2007 19:02	I
7129619	EU-152	14683-23-9	4.70E+00	pCi/L	7.2E+00	7.2E+00	U	1.35E+01		GAMMALL_GS	1.997E+00	L	06/20/2007 19:02	I
7129619	EU-154	15585-10-1	-5.05E-01	pCi/L	8.0E+00	8.0E+00	U	1.49E+01		GAMMALL_GS	1.997E+00	L	06/20/2007 19:02	I
7129619	EU-155	14391-16-3	-1.61E+00	pCi/L	4.9E+00	4.9E+00	U	8.42E+00		GAMMALL_GS	1.997E+00	L	06/20/2007 19:02	I
7129619	K-40	13966-00-2	6.65E+01	pCi/L	7.2E+01	7.2E+01	U	4.74E+01		GAMMALL_GS	1.997E+00	L	06/20/2007 19:02	I
7129619	RU-106	13967-48-1	-1.48E+00	pCi/L	2.4E+01	2.4E+01	U	4.31E+01		GAMMALL_GS	1.997E+00	L	06/20/2007 19:02	I
7129619	SB-125	14234-35-6	-1.05E+00	pCi/L	6.4E+00	6.4E+00	U	1.12E+01		GAMMALL_GS	1.997E+00	L	06/20/2007 19:02	I
7129616	Uranium	7440-61-1	2.66E+02	ug/L	3.1E+01	3.1E+01		8.35E-02		UTOT_KPA	2.51E-02	ML	06/19/2007 14:35	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWCHW20	B1N4L5		MW6-SBB-A1	W07-005	W05172					05/03/2007 09:55

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7171388	TC-99	14133-76-7	9.67E+03	pCi/L	6.5E+01	5.8E+02		1.27E+01	100.0	TC99_ETVDSK_LS	1.258E-01	L	06/20/2007 21:42	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWCJC10	B1N4M0		MW6-SBB-A1	W07-005	W05172					05/03/2007 10:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	9.84E+03	pCi/L	3.4E+02	5.2E+02		2.97E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/16/2007 13:16	I
7129619	BE-7	13966-02-4	-1.03E+01	pCi/L	4.0E+01	4.0E+01	U	6.95E+01		GAMMALL_GS	2.002E+00	L	06/20/2007 22:10	I
7129619	CO-60	10198-40-0	7.21E+01	pCi/L	1.3E+01	1.3E+01		4.32E+00		GAMMALL_GS	2.002E+00	L	06/20/2007 22:10	I
7129619	CS-134	13967-70-9	1.18E-01	pCi/L	3.6E+00	3.6E+00	U	6.52E+00		GAMMALL_GS	2.002E+00	L	06/20/2007 22:10	I
7129619	CS-137	10045-97-3	-2.88E+00	pCi/L	2.7E+00	2.7E+00	U	4.22E+00		GAMMALL_GS	2.002E+00	L	06/20/2007 22:10	I
7129619	EU-152	14683-23-9	2.78E+00	pCi/L	7.0E+00	7.0E+00	U	1.30E+01		GAMMALL_GS	2.002E+00	L	06/20/2007 22:10	I
7129619	EU-154	15585-10-1	-3.64E+00	pCi/L	8.0E+00	8.0E+00	U	1.39E+01		GAMMALL_GS	2.002E+00	L	06/20/2007 22:10	I
7129619	EU-155	14391-16-3	-1.71E+00	pCi/L	5.3E+00	5.3E+00	U	9.12E+00		GAMMALL_GS	2.002E+00	L	06/20/2007 22:10	I
7129619	K-40	13966-00-2	2.73E+01	pCi/L	6.3E+01	6.3E+01	U	1.41E+02		GAMMALL_GS	2.002E+00	L	06/20/2007 22:10	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

7129619	RU-106	13967-48-1	1.22E+01	pCi/L	2.7E+01	2.7E+01	U	5.08E+01		GAMMALL_GS	2.002E+00	L	06/20/2007 22:10	I
7129619	SB-125	14234-35-6	1.30E+00	pCi/L	7.0E+00	7.0E+00	U	1.27E+01		GAMMALL_GS	2.002E+00	L	06/20/2007 22:10	I
7129612	TC-99	14133-76-7	2.06E+04	pCi/L	8.1E+01	1.2E+03		1.06E+01	100.0	TC99_SEP_LSC	1.248E-01	L	06/19/2007 10:39	I
7129616	Uranium	7440-61-1	5.04E+00	ug/L	5.2E-01	5.2E-01		8.28E-02		UTOT_KPA	2.53E-02	ML	06/19/2007 14:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWCJM10	B1N4M5		MW6-SBB-A1	W07-005	W05172					05/03/2007 12:42

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	5.52E+03	pCi/L	2.7E+02	3.6E+02		2.98E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/16/2007 14:38	I
7129619	BE-7	13966-02-4	-1.04E+01	pCi/L	2.3E+01	2.3E+01	U	3.92E+01		GAMMALL_GS	2.0006E+00	L	06/20/2007 22:14	I
7129619	CO-60	10198-40-0	8.97E+00	pCi/L	3.9E+00	3.9E+00		3.72E+00		GAMMALL_GS	2.0006E+00	L	06/20/2007 22:14	I
7129619	CS-134	13967-70-9	-2.04E-01	pCi/L	1.9E+00	1.9E+00	U	3.57E+00		GAMMALL_GS	2.0006E+00	L	06/20/2007 22:14	I
7129619	CS-137	10045-97-3	1.16E-01	pCi/L	1.8E+00	1.8E+00	U	3.37E+00		GAMMALL_GS	2.0006E+00	L	06/20/2007 22:14	I
7129619	EU-152	14683-23-9	-1.00E+00	pCi/L	4.9E+00	4.9E+00	U	8.51E+00		GAMMALL_GS	2.0006E+00	L	06/20/2007 22:14	I
7129619	EU-154	15585-10-1	8.08E-03	pCi/L	5.4E+00	5.4E+00	U	1.03E+01		GAMMALL_GS	2.0006E+00	L	06/20/2007 22:14	I
7129619	EU-155	14391-16-3	-4.65E+00	pCi/L	4.2E+00	4.2E+00	U	6.64E+00		GAMMALL_GS	2.0006E+00	L	06/20/2007 22:14	I
7129619	K-40	13966-00-2	8.99E+00	pCi/L	2.6E+01	2.6E+01	U	5.90E+01		GAMMALL_GS	2.0006E+00	L	06/20/2007 22:14	I
7129619	RU-106	13967-48-1	8.16E-01	pCi/L	1.8E+01	1.8E+01	U	3.18E+01		GAMMALL_GS	2.0006E+00	L	06/20/2007 22:14	I
7129619	SB-125	14234-35-6	2.05E+00	pCi/L	4.4E+00	4.4E+00	U	8.36E+00		GAMMALL_GS	2.0006E+00	L	06/20/2007 22:14	I
7129616	Uranium	7440-61-1	3.27E+02	ug/L	3.9E+01	3.9E+01		8.28E-02		UTOT_KPA	2.53E-02	ML	06/19/2007 14:43	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWCJM20	B1N4M5		MW6-SBB-A1	W07-005	W05172					05/03/2007 12:42

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7171388	TC-99	14133-76-7	4.98E+03	pCi/L	4.7E+01	3.0E+02		1.27E+01	100.0	TC99_ETVDSK_LS	1.253E-01	L	06/20/2007 22:23	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEP110	B1MF90		MW6-SBB-A1	S07-003	W05172					05/04/2007 12:07

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129621	H-3	10028-17-8	1.16E+02	pCi/L	1.0E+01	2.3E+01		5.94E+00	100.0	TRITIUM_ELECT_L	1.50E-01	L	06/15/2007 02:11	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEP510	B1MDN5		MW6-SBB-A1	S07-003	W05172					05/04/2007 10:36

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35704 File Name: h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129617	ALPHA	12587-46-1	8.93E+00	pCi/L	2.9E+00	3.6E+00		2.24E+00	100.0	9310_ALPHABETA	2.007E-01	L	06/18/2007 19:55	I
7129618	BETA	12587-47-2	1.92E+01	pCi/L	2.4E+00	3.4E+00		2.93E+00	100.0	9310_ALPHABETA	1.984E-01	L	06/18/2007 17:36	I
7129616	Uranium	7440-61-1	1.90E+01	ug/L	2.2E+00	2.2E+00		7.51E-02		UTOT_KPA	2.79E-02	ML	06/19/2007 15:02	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEP610	B1MDN7		MW6-SBB-A1	S07-003	W05172					05/04/2007 11:23

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129617	ALPHA	12587-46-1	2.06E+00	pCi/L	1.5E+00	1.5E+00		1.89E+00	100.0	9310_ALPHABETA	2.006E-01	L	06/18/2007 19:55	I
7129618	BETA	12587-47-2	1.70E+01	pCi/L	2.5E+00	4.0E+00		3.10E+00	100.0	9310_ALPHABETA	1.849E-01	L	06/18/2007 17:36	I
7129616	Uranium	7440-61-1	1.90E+01	ug/L	2.3E+00	2.3E+00		8.25E-02		UTOT_KPA	2.54E-02	ML	06/19/2007 15:06	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEP810	B1MDN8		MW6-SBB-A1	S07-003	W05172					05/04/2007 11:23

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129617	ALPHA	12587-46-1	-4.18E-02	pCi/L	3.1E-01	3.1E-01	U	1.04E+00	100.0	9310_ALPHABETA	1.994E-01	L	06/18/2007 20:59	I
7129618	BETA	12587-47-2	6.22E-01	pCi/L	1.2E+00	1.2E+00	U	2.58E+00	100.0	9310_ALPHABETA	1.987E-01	L	06/18/2007 17:37	I
7129616	Uranium	7440-61-1	1.93E-02	ug/L	2.3E-03	2.3E-03	U	7.59E-02		UTOT_KPA	2.76E-02	ML	06/19/2007 15:08	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEPC10	B1N4K1		MW6-SBB-A1	W07-005	W05172					05/04/2007 11:30

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	2.16E+03	pCi/L	1.9E+02	2.3E+02		2.98E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/16/2007 16:00	I
7129618	BETA	12587-47-2	2.49E+02	pCi/L	8.9E+00	3.5E+01		5.16E+00	100.0	9310_ALPHABETA	7.54E-02	L	06/18/2007 18:23	I
7129612	TC-99	14133-76-7	8.66E+02	pCi/L	1.8E+01	5.7E+01		1.14E+01	100.0	TC99_SEP_LSC	1.268E-01	L	06/19/2007 10:39	I
7129616	Uranium	7440-61-1	3.03E+00	ug/L	3.1E-01	3.1E-01		8.19E-02		UTOT_KPA	2.56E-02	ML	06/19/2007 14:44	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEPG10	B1N4K5		MW6-SBB-A1	W07-005	W05172					05/04/2007 08:58

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	1.36E+04	pCi/L	3.9E+02	6.6E+02		2.96E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/16/2007 17:21	I
7129612	TC-99	14133-76-7	1.52E+02	pCi/L	7.8E+00	1.4E+01		9.90E+00	100.0	TC99_SEP_LSC	1.268E-01	L	06/19/2007 10:39	I
7129616	Uranium	7440-61-1	5.76E+00	ug/L	6.9E-01	6.9E-01		8.35E-02		UTOT_KPA	2.51E-02	ML	06/19/2007 14:48	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35704 File Name: h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEPK10	B1N4K6		MW6-SBB-A1	W07-005	W05172					05/04/2007 08:58

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	1.35E+04	pCi/L	3.9E+02	6.6E+02		2.97E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/16/2007 18:43	I
7129612	TC-99	14133-76-7	1.46E+02	pCi/L	7.8E+00	1.4E+01		1.02E+01	100.0	TC99_SEP_LSC	1.255E-01	L	06/19/2007 10:39	I
7129616	Uranium	7440-61-1	5.71E+00	ug/L	6.9E-01	6.9E-01		8.12E-02		UTOT_KPA	2.58E-02	ML	06/19/2007 14:52	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEPP10	B1N4R9		MW6-SBB-A1	W07-005	W05172					05/04/2007 09:56

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	1.12E+04	pCi/L	3.6E+02	5.7E+02		2.97E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/17/2007 01:32	I
7129612	TC-99	14133-76-7	3.86E+02	pCi/L	1.2E+01	2.8E+01		1.01E+01	100.0	TC99_SEP_LSC	1.271E-01	L	06/19/2007 10:39	I
7129616	Uranium	7440-61-1	5.64E+00	ug/L	5.8E-01	5.8E-01		8.09E-02		UTOT_KPA	2.59E-02	ML	06/19/2007 14:54	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEPQ10	B1N4T4		MW6-SBB-A1	W07-005	W05172					05/04/2007 10:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	1.16E+03	pCi/L	1.6E+02	1.9E+02		2.98E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/17/2007 02:54	I
7129617	ALPHA	12587-46-1	-1.84E-01	pCi/L	5.0E-01	5.0E-01	U	1.69E+00	100.0	9310_ALPHABETA	1.113E-01	L	06/18/2007 18:24	I
7129618	BETA	12587-47-2	8.71E+00	pCi/L	1.8E+00	2.2E+00		2.73E+00	100.0	9310_ALPHABETA	1.996E-01	L	06/18/2007 17:36	I
7129612	TC-99	14133-76-7	1.17E+01	pCi/L	4.5E+00	6.5E+00		9.97E+00	100.0	TC99_SEP_LSC	1.254E-01	L	06/19/2007 10:39	I
7129616	Uranium	7440-61-1	2.97E+00	ug/L	3.0E-01	3.0E-01		7.76E-02		UTOT_KPA	2.70E-02	ML	06/19/2007 14:56	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEPW10	B1N4T6		MW6-SBB-A1	W07-005	W05172					05/04/2007 12:20

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	9.59E+03	pCi/L	3.4E+02	5.2E+02		2.98E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/17/2007 04:16	I
7129616	Uranium	7440-61-1	3.54E+02	ug/L	4.2E+01	4.2E+01		7.94E-02		UTOT_KPA	2.64E-02	ML	06/19/2007 15:01	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEPW20	B1N4T6		MW6-SBB-A1	W07-005	W05172					05/04/2007 12:20

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7171388	TC-99	14133-76-7	2.70E+04	pCi/L	1.1E+02	1.6E+03		1.27E+01	100.0	TC99_ETVDSK_LS	1.259E-01	L	06/20/2007 23:05	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 35704 File Name: h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWEQK10	B1MRM5		MW6-SBB-A1	S07-004	W05172					05/04/2007 09:20

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	2.39E+04	pCi/L	5.1E+02	1.1E+03		2.99E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/17/2007 05:38	I
7129613	I-129L	15046-84-1	-7.10E-02	pCi/L	1.5E-01	1.5E-01	U	2.54E-01	91.9	I129LL_SEP_LEPS	3.9071E+00	L	06/15/2007 14:35	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWFA810	B1N541		MW6-SBB-A1	W07-005	W05172					05/04/2007 12:20

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129617	ALPHA	12587-46-1	1.77E+00	pCi/L	1.3E+00	1.3E+00		1.69E+00	100.0	9310_ALPHABETA	1.988E-01	L	06/18/2007 20:59	I
7129618	BETA	12587-47-2	7.26E+00	pCi/L	1.7E+00	2.2E+00		2.72E+00	100.0	9310_ALPHABETA	1.997E-01	L	06/18/2007 17:37	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWH5010	B1N3Y1		MW6-SBB-A1	S07-005	W05172					05/07/2007 09:36

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129620	H-3	10028-17-8	7.49E+02	pCi/L	1.5E+02	1.7E+02		2.97E+02	100.0	906.0_H3_LSC	5.00E-03	L	06/17/2007 06:59	I
7129613	I-129L	15046-84-1	1.84E+00	pCi/L	3.9E-01	3.9E-01	U	6.84E-01	93.5	I129LL_SEP_LEPS	3.9985E+00	L	06/15/2007 14:39	I
7129616	Uranium	7440-61-1	3.15E+00	ug/L	3.2E-01	3.2E-01		8.19E-02		UTOT_KPA	2.56E-02	ML	06/19/2007 15:10	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWH5W10	B1N357		MW6-SBB-A1	I07-044	W05172					05/07/2007 10:59

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7129613	I-129L	15046-84-1	3.45E-01	pCi/L	1.2E-01	1.2E-01	U	2.80E-01	94.6	I129LL_SEP_LEPS	3.8842E+00	L	06/15/2007 14:38	I

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:
9JWH5W20	B1N357		MW6-SBB-A1	I07-044	W05172					05/07/2007 10:59

Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7171388	TC-99	14133-76-7	1.40E+02	pCi/L	9.4E+00	1.5E+01		1.27E+01	100.0	TC99_ETVDSK_LS	1.255E-01	L	06/21/2007 00:29	I

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3K2AB	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/07/2007 10:59
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 05/07/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BL	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7171388	TC-99	-5.14E+00	pCi/L	6.7E+00	U	1.28E+01	100.0		TC99_ETVDSK	1.25E-01	06/21/2007				D
BLK	14133-76-7			5.0E+00						L	01:52				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3L1AB	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 11:30
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BN	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129612	TC-99	2.75E+00	pCi/L	5.9E+00	U	9.92E+00	100.0		TC99_SEP_LS	1.256E-01	06/19/2007				D
BLK	14133-76-7			4.2E+00						L	10:39				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3M1AB	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/03/2007 11:27
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BP	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129613	I-129L	9.16E-02	pCi/L	1.3E-01	U	2.63E-01	93.0		I129LL_SEP_L	3.9985E+00	06/15/2007				D
BLK	15046-84-1			1.3E-01						L	16:29				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3N1AB	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/07/2007 09:36
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/07/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BR	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129616	Uranium	1.06E-02	ug/L	1.7E-03	U	8.06E-02			UTOT_KPA	2.60E-02	06/19/2007				D
BLK	7440-61-1			1.7E-03						ML	14:23				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3P1AB	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 10:36
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BU	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129617	ALPHA	-1.26E-01	pCi/L	1.8E-01	U	6.53E-01	100.0		9310_ALPHAB	1.985E-01	06/19/2007				D
BLK	12587-46-1			1.8E-01						L	08:13				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3Q1AB	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 11:23
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BW	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129618	BETA	8.02E-01	pCi/L	9.3E-01	U	1.79E+00	100.0		9310_ALPHAB	2.011E-01	06/18/2007				D
BLK	12587-47-2			9.2E-01						L	18:23				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3T1AB	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/03/2007 12:13
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 05/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BY	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129619	BE-7	-2.34E+01	pCi/L	2.4E+01	U	3.79E+01			GAMMALL_GS	1.997E+00	06/20/2007				D
BLK	13966-02-4			2.4E+01						L	22:30				
7129619	CO-60	3.95E-02	pCi/L	2.1E+00	U	4.24E+00			GAMMALL_GS	1.997E+00	06/20/2007				D
BLK	10198-40-0			2.1E+00						L	22:30				
7129619	CS-134	-5.75E-03	pCi/L	1.8E+00	U	3.50E+00			GAMMALL_GS	1.997E+00	06/20/2007				D
BLK	13967-70-9			1.8E+00						L	22:30				
7129619	CS-137	-2.27E-01	pCi/L	1.7E+00	U	3.17E+00			GAMMALL_GS	1.997E+00	06/20/2007				D
BLK	10045-97-3			1.7E+00						L	22:30				
7129619	EU-152	-1.98E+00	pCi/L	5.4E+00	U	9.19E+00			GAMMALL_GS	1.997E+00	06/20/2007				D
BLK	14683-23-9			5.4E+00						L	22:30				
7129619	EU-154	9.21E-01	pCi/L	6.2E+00	U	1.26E+01			GAMMALL_GS	1.997E+00	06/20/2007				D
BLK	15585-10-1			6.2E+00						L	22:30				
7129619	EU-155	5.40E-01	pCi/L	3.5E+00	U	6.38E+00			GAMMALL_GS	1.997E+00	06/20/2007				D
BLK	14391-16-3			3.5E+00						L	22:30				
7129619	K-40	-4.67E+00	pCi/L	3.1E+01	U	6.59E+01			GAMMALL_GS	1.997E+00	06/20/2007				D
BLK	13966-00-2			3.1E+01						L	22:30				
7129619	RU-106	-6.23E+00	pCi/L	1.6E+01	U	2.75E+01			GAMMALL_GS	1.997E+00	06/20/2007				D
BLK	13967-48-1			1.6E+01						L	22:30				
7129619	SB-125	8.41E-01	pCi/L	5.4E+00	U	9.96E+00			GAMMALL_GS	1.997E+00	06/20/2007				D
BLK	14234-35-6			5.4E+00						L	22:30				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3V1AB	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 08:58
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129620	H-3	8.02E+00	pCi/L	1.3E+02	U	2.97E+02	100.0		906.0_H3_LSC	5.00E-03	06/16/2007				D
BLK	10028-17-8			1.2E+02						L	07:49				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3V1DX	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 08:58
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**BLK**		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129620	H-3	4.51E+01	pCi/L	1.4E+02	U	2.99E+02	100.0		906.0_H3_LSC	5.00E-03	06/16/2007				D
BLK	10028-17-8			1.2E+02						L	22:49				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3X1AB	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 12:07
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BLK		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129621	H-3	2.73E+00	pCi/L	8.2E+00	U	5.94E+00	100.0		TRITIUM_ELE	1.50E-01	06/14/2007				D
BLK	10028-17-8			6.5E+00						L	23:36				

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3K2CS	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/07/2007 10:59
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/07/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BM	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7171388	TC-99	5.18E+02	pCi/L	3.8E+01		1.25E+01	100.0	5.30E+02	TC99_ETVDSK	1.277E-01	06/21/2007			70	D
BS	14133-76-7			1.6E+01				97.7		L	02:33			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3L1CS	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 11:30
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BO	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129612	TC-99	4.77E+02	pCi/L	3.4E+01		1.01E+01	100.0	5.39E+02	TC99_SEP_LS	1.25E-01	06/19/2007			70	D
BS	14133-76-7			1.3E+01				88.6		L	10:39			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JWL3M1CS **Sdg/Rept Nbr:** W05172 35704 **Collection Date:** 05/03/2007 11:27

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BQ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129613	I-129L	9.53E+00	pCi/L	1.2E+00		3.25E-01	94.4	9.90E+00	I129LL_SEP_L	3.9978E+00	06/15/2007			70	D
BS	15046-84-1			1.2E+00				96.2		L	16:32			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id: JWL3N1CS **Sdg/Rept Nbr:** W05172 35704 **Collection Date:** 05/07/2007 09:36

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/07/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BS	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129616	Uranium	3.57E+01	ug/L	4.2E+00		8.06E-02		3.43E+01	UTOT_KPA	2.60E-02	06/19/2007			70	D
BS	7440-61-1			4.2E+00				103.8		ML	14:27			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3N1DS	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/07/2007 09:36
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/07/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BT	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129616	Uranium	3.46E+00	ug/L	3.5E-01		8.22E-02		3.58E+00	UTOT_KPA	2.55E-02	06/19/2007			70	D
BS	7440-61-1			3.5E-01				96.4		ML	14:29			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3P1CS	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 10:36
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BV	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129617	ALPHA	1.99E+01	pCi/L	4.9E+00		4.93E-01	100.0	2.24E+01	9310_ALPHAB	2.008E-01	06/19/2007			70	D
BS	12587-46-1			2.1E+00				89.0		L	08:13			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JWL3Q1CS **Sdg/Rept Nbr:** W05172 35704 **Collection Date:** 05/04/2007 11:23

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BX	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129618	BETA	2.20E+01	pCi/L	3.6E+00		1.89E+00	100.0	2.28E+01	9310_ALPHAB	1.992E-01	06/18/2007			70	D
BS	12587-47-2			1.8E+00				96.7		L	18:23			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3T1CS	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/03/2007 12:13
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129619	CO-60	4.04E+01	pCi/L	9.9E+00		6.36E+00		3.84E+01	GAMMALL_GS	1.9999E+00	06/20/2007			70	D
BS	10198-40-0			9.9E+00				105.2		L	22:14			130	
7129619	CS-137	2.42E+01	pCi/L	7.0E+00		5.70E+00		2.49E+01	GAMMALL_GS	1.9999E+00	06/20/2007			70	D
BS	10045-97-3			7.0E+00				97.1		L	22:14			130	
7129619	EU-152	7.54E+01	pCi/L	2.3E+01		1.29E+01		7.66E+01	GAMMALL_GS	1.9999E+00	06/20/2007			70	D
BS	14683-23-9			2.3E+01				98.5		L	22:14			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3V1CS	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 08:58
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129620	H-3	2.49E+03	pCi/L	2.4E+02		2.97E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	06/16/2007			70	D
BS	10028-17-8			2.0E+02				91.2		L	09:11			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWL3V1EM	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 08:58
Client Id:	NA	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	BS		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129620	H-3	2.62E+03	pCi/L	2.5E+02		3.00E+02	100.0	2.73E+03	906.0_H3_LSC	5.00E-03	06/17/2007			70	D
BS	10028-17-8			2.1E+02				96.1		L	00:11			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JWL3X1CS **Sdg/Rept Nbr:** W05172 35704 **Collection Date:** 05/04/2007 12:07

Client Id: NA **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** BS **Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								CF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129621	H-3	3.77E+02	pCi/L	6.7E+01		6.03E+00	100.0	4.54E+02	TRITIUM_ELE	1.5002E-01	06/15/2007			70	D
BS	10028-17-8			1.6E+01				83.0		L	00:54			130	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWA5N1CR	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/03/2007 11:27
Client Id:	B1M6K6	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-027	MW6-SBB-A19981								AZ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129613	I-129L	2.05E+00	pCi/L	5.0E-01		2.98E-01	94.6		I129LL_SEP_L	3.8841E+00	06/15/2007	1.7	0.1		D
DUP	15046-84-1	2.08E+00		5.0E-01						L	12:20	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JWCG11ER **Sdg/Rept Nbr:** W05172 35704 **Collection Date:** 05/03/2007 12:13

Client Id: B1N4J6 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/03/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BA	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129619	BE-7	2.86E+01	pCi/L	4.8E+01	U	8.91E+01			GAMMALL_GS	1.9312E+00	06/20/2007	570.3	1.2		D
DUP	13966-02-4	-1.37E+01		4.8E+01						L	22:13	20.0	3		
7129619	CO-60	5.34E+01	pCi/L	1.1E+01		4.87E+00			GAMMALL_GS	1.9312E+00	06/20/2007	11.4	0.7		D
DUP	10198-40-0	4.76E+01		1.1E+01						L	22:13	20.0	3		
7129619	CS-134	1.29E+00	pCi/L	3.9E+00	U	7.33E+00			GAMMALL_GS	1.9312E+00	06/20/2007	120.7	0.3		D
DUP	13967-70-9	3.18E-01		3.9E+00						L	22:13	20.0	3		
7129619	CS-137	-3.99E-01	pCi/L	3.3E+00	U	5.88E+00			GAMMALL_GS	1.9312E+00	06/20/2007	756.2	0.5		D
DUP	10045-97-3	6.86E-01		3.3E+00						L	22:13	20.0	3		
7129619	EU-152	4.08E+00	pCi/L	9.0E+00	U	1.64E+01			GAMMALL_GS	1.9312E+00	06/20/2007	42.1	0.2		D
DUP	14683-23-9	2.66E+00		9.0E+00						L	22:13	20.0	3		
7129619	EU-154	2.60E+00	pCi/L	9.1E+00	U	1.81E+01			GAMMALL_GS	1.9312E+00	06/20/2007	234.8	0.4		D
DUP	15585-10-1	-2.08E-01		9.1E+00						L	22:13	20.0	3		
7129619	EU-155	3.09E-02	pCi/L	6.4E+00	U	1.12E+01			GAMMALL_GS	1.9312E+00	06/20/2007	0.0	0.6		D
DUP	14391-16-3	-2.59E+00		6.4E+00						L	22:13	20.0	3		
7129619	K-40	-2.46E+01	pCi/L	6.5E+01	U	1.44E+02			GAMMALL_GS	1.9312E+00	06/20/2007	0.0	0.8		D
DUP	13966-00-2	1.40E+01		6.5E+01						L	22:13	20.0	3		
7129619	RU-106	2.56E+01	pCi/L	3.1E+01	U	6.08E+01			GAMMALL_GS	1.9312E+00	06/20/2007	322.9	1.4		D
DUP	13967-48-1	-6.03E+00		3.1E+01						L	22:13	20.0	3		
7129619	SB-125	1.19E+00	pCi/L	9.2E+00	U	1.64E+01			GAMMALL_GS	1.9312E+00	06/20/2007	0.0	0.8		D
DUP	14234-35-6	-3.78E+00		9.2E+00						L	22:13	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JWEP11CR **Sdg/Rept Nbr:** W05172 35704 **Collection Date:** 05/04/2007 12:07

Client Id: B1MF90 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	MW6-SBB-A19981								BB	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129621	H-3	1.23E+02	pCi/L	2.4E+01		5.99E+00	100.0		TRITIUM_ELE	1.50E-01	06/15/2007	5.8	0.4		D
DUP	10028-17-8	1.16E+02		9.9E+00						L	03:29	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWEP51FR	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 10:36
Client Id:	B1MDN5	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	MW6-SBB-A19981								BD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129617	ALPHA	9.09E+00	pCi/L	3.6E+00		2.05E+00	100.0		9310_ALPHAB	2.018E-01	06/18/2007	1.8	0.1		D
DUP	12587-46-1	8.93E+00		2.9E+00						L	19:55	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JWEP61ER **Sdg/Rept Nbr:** W05172 35704 **Collection Date:** 05/04/2007 11:23

Client Id: B1MDN7 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	MW6-SBB-A19981								BE	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129618	BETA	1.70E+01	pCi/L	3.5E+00		2.96E+00	100.0		9310_ALPHAB	1.861E-01	06/18/2007	.1	0.		D
DUP	12587-47-2	1.70E+01		2.4E+00						L	17:37	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWEPC1GR	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 11:30
Client Id:	B1N4K1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BF	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129612	TC-99	8.38E+02	pCi/L	5.5E+01		1.05E+01	100.0		TC99_SEP_LS	1.25E-01	06/19/2007	3.3	0.7		D
DUP	14133-76-7	8.66E+02		1.7E+01						L	10:39	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWEPK1ER	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 08:58
Client Id:	B1N4K6	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BH	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129620	H-3	1.33E+04	pCi/L	6.5E+02		2.96E+02	100.0		906.0_H3_LSC	5.00E-03	06/16/2007	2.0	0.6		D
DUP	10028-17-8	1.35E+04		3.9E+02						L	20:05	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWH501ER	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/07/2007 09:36
Client Id:	B1N3Y1	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	DUP		**Received Date:** 05/07/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-005	MW6-SBB-A19981								BJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129616	Uranium	3.21E+00	ug/L	3.3E-01		8.35E-02			UTOT_KPA	2.51E-02	06/19/2007	2.0	0.3		D
DUP	7440-61-1	3.15E+00		3.3E-01						ML	15:11	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

Lab Sample Id: JWH5W2DR **Sdg/Rept Nbr:** W05172 35704 **Collection Date:** 05/07/2007 10:59

Client Id: B1N357 **Matrix:** WATER WATER **Sample On Date:**

Moisture/Solids%*: **QC Type:** DUP **Received Date:** 05/07/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
I07-044	MW6-SBB-A19981								BK	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7171388	TC-99	1.48E+02	pCi/L	1.6E+01		1.26E+01	100.0		TC99_ETVDSK	1.264E-01	06/21/2007	5.8	0.8		D
DUP	14133-76-7	1.40E+02		9.5E+00						L	01:10	20.0	3		

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWEP51EW	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 10:36
Client Id:	B1MDN5	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	**MS**		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
S07-003	MW6-SBB-A19981								BC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129616	Uranium	3.72E+01	ug/L	7.0E+00		8.19E-02		3.52E+01	UTOT_KPA	2.56E-02	06/19/2007			60	D
MS	7440-61-1			7.0E+00				105.8		ML	15:04			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWEPG1EW	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 08:58
Client Id:	B1N4K5	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	MS		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7129612	TC-99	3.28E+03	pCi/L	2.1E+02		1.00E+01	100.0	3.66E+03	TC99_SEP_LS	1.245E-01	06/19/2007			60	D
MS	14133-76-7			3.2E+01				89.7		L	10:39			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R **FormatType:** FEAD **VersionNbr:** 05 **File Name:** h:\Reportdb\edd\FeadIV\Rad\W05172.Edd, h:\Reportdb\edd\FeadIV\Rad\35704.Edd

Lab Sample Id:	JWEPW2FW	**Sdg/Rept Nbr:**	W05172	35704	**Collection Date:** 05/04/2007 12:20
Client Id:	B1N4T6	**Matrix:**	WATER	WATER	**Sample On Date:**
Moisture/Solids%*:		**QC Type:**	MS		**Received Date:** 05/04/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
W07-005	MW6-SBB-A19981								BI	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu-al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7171388	TC-99	4.31E+03	pCi/L	2.5E+03		1.27E+01	100.0	3.62E+03	TC99_ETVDSK	1.257E-01	06/20/2007			60	D
MS	14133-76-7			1.2E+02				119.3		L	23:47			140	

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/19/2007 3:35:38 PM

Lot No., Due Date: J7E040306,J7E070109,J7E070107; 06/21/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7129617; RALPHA-A Alpha by GPC-Am

SDG, Matrix: W05172; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JWEPQ1AC 111.30<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JWA581AC ALPHA 2.7E+00 L:1.7E+00 JWEP51AA ALPHA 8.9E+00 L:2.2E+00 JWEP61AA ALPHA 2.1E+00 L:1.9E+00 JWFA81AA ALPHA 1.8E+00 L:1.7E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Callin Level Found => ALPHA	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		

8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review John Horton **Date** 6-19-7

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 712617
W05172

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other 1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 6-20-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/19/2007 10:56:52 AM

Lot No., Due Date: J7E040306,J7E070109,J7E070107; 06/21/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7129618; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05172; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JWEPC1AC 75.40<200.00 JWEP61AC 184.90<200.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!			✓
8.17 Tracer within Control Limits. OK	✓		
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	✓		
8.19 Sample Specific MDC <= CRDL. MDC/MDA > CRDL => JWEPC1AC BETA 5.2E+00>4.0E+00 Q:C1		✓	
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JWA581AD BETA 7.1E+00 L:2.8E+00 JWEPC1AC BETA 2.5E+02 L:5.2E+00 JWEPQ1AD BETA 8.7E+00 L:2.7E+00 JWEP51AC BETA 1.9E+01 L:2.9E+00 JWEP61AC BETA 1.7E+01 L:3.1E+00 JWFA81AC BETA 7.3E+00 L:2.7E+00		✓	
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => BETA OK; No Callin Level Found => BETA	✓		

8.24 Result + 3s >=0, Not Too Negative. OK	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments: NCM-10-10153			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Lisa Anderson **Date** 12/19/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 712918
W05172

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?		/	
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other 1. Are all Nonconformances included and noted?	/		
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response: See NCM

Second Level Review: Sheryl R Adam Date: 6-19-07

Clouseau
Nonconformance Memo

STL

NCM #: **10-10153**
NCM Initiated By: Lisa Antonson
Date Opened: 06/19/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Beta by GPC-Sr/Y
Lot #'s (Sample #'s): J7E040306 (1), J7E070107 (1,5,7), J7E070109 (2,3,4), J7E090000 (618),
QC Batches: 7129618,

Nonconformance: MDA not met
Subcategory: Sample size reduced due to high residue mass

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	06/19/2007	In this beta batch, sample JWEPC1AC doesn't meet CRDL. The result for this sample exceeds the MDA achieved. The sample had a reduced aliquot based on weight screens.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	06/19/2007	NA

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
	Response	Response Note			

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/21/2007 3:57:01 PM

Lot No., Due Date: J7E040342,J7E070107; 06/21/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7129619; RGAMMA Gamma by GER

SDG, Matrix: W05172; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?			✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Lisa Jackson **Date** _____

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7129619
W05172

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other 1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 6-22-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/18/2007 2:02:34 PM

Lot No., Due Date: J7E040306,J7E040299,J7E070112,J7E080313,J7E080312; 06/21/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7129613; RGAMLEPS Gamma by LEPS

SDG, Matrix: W05172; WATER

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes ✓	No	N/A
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes	No	N/A ✓
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes ✓	No	N/A
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level Review Kim Anderson **Date** 6/18/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 712913
605172

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other 1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response: _____

Second Level Review: Cheryl A Adams Date: 6-18-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/22/2007 10:36:09 AM

Lot No., Due Date: J7E040342,J7E070107,J7E080312; 06/21/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7171388; RTC99 Tc-99 by LSC

SDG, Matrix: W05172; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JWEPW2AF TCSG<>TCSE Q:V9		✓	
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used OK	✓		
8.07 The Correct Count Geometry was Used. OK	✓		
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBlks) found in Batch!			✓
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!			✓
8.16 MS within Control Limits. OK	✓		
8.17 Tracer within Control Limits. No Tracers found in Batch!			✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!			✓
8.19 Sample Specific MDC <= CRDL. OK	✓		
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!			✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	✓		
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => TC-99 OK; No Callin Level Found => TC-99	✓		
8.24 Result + 3s >=0, Not Too Negative. OK	✓		
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!			✓

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions.)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions.)	Yes	No	N/A
8.3 Comments: NCM 10-10200			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Lisa Anderson **Date** 6/2010

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 717388
W05172

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: See NCM

Second Level Review: Sheryl A Adam Date: 6-22-07

Clouseau
Nonconformance Memo

STL

NCM #: **10-10200**
NCM Initiated By: Lisa Antonson
Date Opened: 06/22/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Tc-99 by LSC
Lot #'s (Sample #'s): J7E040342 (1,2,4), J7E070107 (6), J7E080312 (1), J7E090000 (611),
QC Batches: 7171388,

Nonconformance: Other (describe in detail)
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	06/22/2007	In the original count of this Tc99 batch the TSIE was out and the batch could not be calculated. It was shaken, rewiped and recounted. The TSIE was still out. After consideration by the QA Manager and Technical Director, the decision was made to extend the upper limits of the curve to 480. The samples were able to be calculated and are acceptable.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	06/22/2007	Upper limit was extended to 480.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note	Response	Response Note

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/20/2007 4:04:19 PM

Lot No., Due Date: J7E040342,J7E070107; 06/21/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7129612; RTC99 Tc-99 by LSC

SDG, Matrix: W05172; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	✓		
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?			✓
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?	✓		
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review Mary Lordy **Date** 6-20-07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 712961 L
W0512

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?	✓		
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review: Sheryl R Adams Date: 6-20-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/18/2007 4:14:34 PM

Lot No., Due Date: J7E040306,J7E040342,J7E070107,J7E070112,J7E080313; 06/21/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7129620; RTRITIUM H-3 by LSC

SDG, Matrix: W05172; WATER

	Yes	No	N/A
8.0 Correction Calculation Protocol Used. OK	✓		
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	✓		
8.02 Final Results Are in the Appropriate Activity Units OK	✓		
8.03 Batch Contains the Required QC Appropriate for the Method OK	✓		
8.04 The Correct Tracer and QC Vials Where Used in the Samples OK	✓		
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	✓		
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JWA581AA 5.00<10.00 JWCHW1AA 5.00<10.00 JWCJC1AA 5.00<10.00 JWCJM1AA 5.00<10.00 JWEPC1AA 5.00<10.00 JWEPG1AA 5.00<10.00 JWEPK1AA 5.00<10.00 JWEPP1AA 5.00<10.00 JWEPQ1AA 5.00<10.00 JWEPW1AA 5.00<10.00 JWEQK1AA 5.00<10.00 JWH501AA 5.00<10.00 Q:VB		✓	
8.07 The Correct Count Geometry was Used. Count Geometry => JWL3V1AF SVP15/5<>SVP10/10 JWL3V1AG SVP15/5<>SVP10/10 JWL3V1AA SVP15/5<>SVP10/10 JWL3V1AC SVP15/5<>SVP10/10 JWA581AA SVP15/5<>SVP10/10 JWCHW1AA SVP15/5<>SVP10/10 JWCJC1AA SVP15/5<>SVP10/10 JWCJM1AA SVP15/5<>SVP10/10 JWEPC1AA SVP15/5<>SVP10/10 JWEPG1AA SVP15/5<>SVP10/10 JWEPK1AA SVP15/5<>SVP10/10 JWEPK1AE SVP15/5<>SVP10/10 JWL3V1AH SVP15/5<>SVP10/10 JWL3V1AD SVP15/5<>SVP10/10 JWL3V1AE SVP15/5<>SVP10/10 JWEPP1AA SVP15/5<>SVP10/10 JWEPQ1AA SVP15/5<>SVP10/10 JWEPW1AA SVP15/5<>SVP10/10 JWEQK1AA SVP15/5<>SVP10/10 JWH501AA SVP15/5<>SVP10/10 Q:VC		✓	
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	✓		
8.09 Method Blank is within Control Limits. OK	✓		
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. OK	✓		
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	✓		
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	✓		
8.14 LCS within Control Limits. OK	✓		

ok AL 6/18/07

ok AL 6/18/07

8.15 MLCS within Control Limits. OK	Yes ✓	No	N/A
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A ✓
8.17 Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A ✓
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A ✓
8.19 Sample Specific MDC <= CRDL. OK	Yes ✓	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A ✓
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes ✓	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => H-3 OK; No Callin Level Found => H-3	Yes ✓	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes ✓	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A ✓
8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes	No	N/A ✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate. OK	Yes ✓	No	N/A

First Level Review Angela Long **Date** 6/18/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 712962D
W05172

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other 1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response: _____

Second Level Review: Sheryl A Adam Date: 6-19-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/18/2007 4:05:12 PM

Lot No., Due Date: J7E070109; 06/21/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7129621; RH3EE H3EE by LSC

SDG, Matrix: W05172; WATER

1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	Yes ✓	No	N/A
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	Yes ✓	No	N/A
2.2 Are the QC appropriate for the analysis included in the batch?	Yes ✓	No	N/A
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	Yes ✓	No	N/A
2.4 Does the Worksheets include a Tracer Vial label for each sample?	Yes	No	N/A ✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.2 Is the LCS result, yield, and MDA within contract limits?	Yes ✓	No	N/A
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	Yes	No	N/A ✓
3.4 Are the duplicate result, yields, and MDAs within contract limits?	Yes ✓	No	N/A
3.5 Are the sample yields and MDAs within contract limits?	Yes ✓	No	N/A
4.0 Raw Data			
4.1 Were results calculated in the correct units?	Yes ✓	No	N/A
4.2 Were analysis volumes entered correctly?	Yes ✓	No	N/A
4.3 Were Yields entered correctly?	Yes	No	N/A ✓
4.4 Were spectra reviewed/meet contractual requirements?	Yes ✓	No	N/A
4.5 Were raw counts reviewed for anomalies?	Yes ✓	No	N/A
5.0 Other			
5.1 Are all nonconformances included and noted?	Yes	No	N/A ✓
5.2 Are all required forms filled out?	Yes ✓	No	N/A
5.3 Was the correct methodology used?	Yes ✓	No	N/A
5.4 Was transcription checked?	Yes ✓	No	N/A
5.5 Were all calculations checked at a minimum frequency?	Yes ✓	No	N/A
5.6 Are worksheet entries complete and correct?	Yes ✓	No	N/A

6.0 Comments on any No response:

First Level Review Angela Long **Date** 6/18/07

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 712962 1
W05172

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?			/
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other 1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response:

Second Level Review: Sheryl A Adam Date: 6-19-07

SEVERN TRENT STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

6/20/2007 10:56:19 AM

Lot No., Due Date: J7E040342,J7E070109,J7E070107,J7E080313; 06/21/2007

Client, Site: 384868; PGW 615HANFORD HANFORD

QC Batch No., Method Test: 7129616; RUNAT UNat by KPA

SDG, Matrix: W05172; WATER

	Yes	No	N/A
1.0 COC			
1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?	✓		
2.0 QC Batch			
2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?	✓		
2.2 Are the QC appropriate for the analysis included in the batch?	✓		
2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?	✓		
2.4 Does the Worksheets include a Tracer Vial label for each sample?			✓
3.0 QC & Samples			
3.1 Is the blank results, yield, and MDA within contract limits?	✓		
3.2 Is the LCS result, yield, and MDA within contract limits?	✓		
3.3 Are the MS/MSD results, yields, and MDA within contract limits?	✓		
3.4 Are the duplicate result, yields, and MDAs within contract limits?	✓		
3.5 Are the sample yields and MDAs within contract limits?	✓		
4.0 Raw Data			
4.1 Were results calculated in the correct units?	✓		
4.2 Were analysis volumes entered correctly?	✓		
4.3 Were Yields entered correctly?	✓		
4.4 Were spectra reviewed/meet contractual requirements?	✓		
4.5 Were raw counts reviewed for anomalies?	✓		
5.0 Other			
5.1 Are all nonconformances included and noted?			✓
5.2 Are all required forms filled out?	✓		
5.3 Was the correct methodology used?	✓		
5.4 Was transcription checked?	✓		
5.5 Were all calculations checked at a minimum frequency?			✓
5.6 Are worksheet entries complete and correct?	✓		

6.0 Comments on any No response:

First Level Review John Norton **Date** 6-20-7

SEVERN TRENT STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number: 7129616
W05172

Review Item	Yes (√)	No (√)	N/A (√)
A. Sample Analysis 1. Are the sample yields within acceptance criteria?	/		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	/		
3. Are the correct isotopes reported?	/		
B. QC Samples 1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	/		
2. Does the blank result meet the Contract criteria?	/		
3. Is the blank result < the Contract Detection Limit?	/		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			/
5. Is the LCS recovery with contract acceptance criteria?	/		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	/		
8. Do the MS/MSD results and yields meet acceptance criteria?	/		
9. Do the duplicate sample results and yields meet acceptance criteria?	/		
C. Other 1. Are all Nonconformances included and noted?			/
2. Are all required forms filled out?	/		
3. Was the correct methodology used?	/		
4. Was transcription checked?	/		
5. Were all calculations checked at a minimum frequency?	/		
6. Were units checked?	/		

Comments on any "No" response:

Second Level Review: Sheryl A Adam Date: 6-20-07

PNNL JTE040299
W05172
Due 06-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-027-8**

Page 1 of 1

Collector Fluor Hanford F M HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-027	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, FEBRUARY 2007	HNF -N- 506-6	**Ice Chest No.** ERC **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1M6K6		W	5/3/7	1127	1x20-mL P	Activity Scan	None
B1M6K6		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JWASN	

Relinquished By Print: Fluor Hanford F M HALL Sign: MAY 0 3 2007	Date/Time 1530	Received By Print: ERIC Darby Sign: Eric Darby MAY 0 3 2007	Date/Time 1530
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 5/3/07 1530

Client: PBW SDG #: W05172 NA [ ] SAF #: I07-027 NA [ ]

Work Order Number: JJE040299 Chain of Custody # I07-027-8

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: _____
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Eric Darby Date: 5/3/07 1530

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL JTE040342
W05172
Due 06-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-38**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-586-8	**Ice Chest No.** 3ML-137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4J6		W	5-3-07	1213	1x20-mL P	Activity Scan	None
B1N4J6		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N4J6		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4J6		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JWCG1	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			MAY 0 3 2007 1530	Eric Darby		Eric Darby	MAY 0 3 2007 1530
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL JTE040342
W05172
Due 06-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-62**

Page 1 of 1

Collector ~~Fluor Hanford~~ ~~R. T. SICKLE~~	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-526 B	**Ice Chest No.** SKINS **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4L5		W	5-3-07	0955	1x20-mL P	Activity Scan	None
B1N4L5		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N4L5		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4L5		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N4L5		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JWCHW	

Relinquished By Print: ~~Fluor Hanford~~ ~~R. T. SICKLE~~ Sign:	Date/Time 1530 MAY 03 2007	Received By Print: Eric Darby Sign:	Date/Time 1530 MAY 03 2007
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL JTE040342
W05172
Due 06-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-70**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506-8	**Ice Chest No.** SKINS **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4M0		W	5-3-07	1056	1x20-mL P	Activity Scan	None
B1N4M0		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1N4M0		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N4M0		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4M0		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JWCJC	

Relinquished By Print: Fluor Hanford R. T. SICKLE Sign:	Date/Time 1530 MAY 03 2007	Received By Print: Eric Darby Sign:	Date/Time 1530 MAY 03 2007
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PNNL JTE040342
WO5172
Due 06-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-78**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-508	**Ice Chest No.** SML-137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4M5		W	5-3-07	1242	1x20-mL P	Activity Scan	None
B1N4M5		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N4M5		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4M5		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N4M5		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JWCJM	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford R. T. SICKLE			MAY 03 2007 1530	Eric Dudley		Eric Dudley	MAY 03 2007 1530
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil		DS	=	Drum Solid
SE	= Sediment		DL	=	Drum Liqui
SO	= Solid		T	=	Tissue
SL	= Sludge		WI	=	Wipe
W	= Water		L	=	Liquid
O	= Oil		V	=	Vegetation
A	= Air		X	=	Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 5/3/07 1530

Client: PGW SDG #: W05172 NA [ ] SAF #: W07-005 NA [ ]

Work Order Number: JTE040342 Chain of Custody # W07-005-38, 02, 70 & 78

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 4
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Ev Darby Date: 5/3/07 1530

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL JTE070107
W05172
Due 06-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-46**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-306 8	**Ice Chest No.** SML 137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4K1		W	5-4-07	1130	1x20-mL P	Activity Scan	None
B1N4K1		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1N4K1		W			1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N4K1		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4K1		W			1x1000-mL P	9310_ALPHABETA_GPC: Gross Beta (1)	HNO3 to pH <2
B1N4K1		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JWEPC	

Relinquished By Fluor Hanford R. T. SICKLE Print Sign Date/Time 1410 MAY 04 2007	Received By Eric Darby Print Eric Darby Sign Date/Time 1410 MAY 04 2007	Matrix *
Relinquished By Date/Time	Received By Date/Time	S = Soil, SE = Sediment, SO = Solid, SL = Sludge, W = Water, O = Oil, A = Air, DS = Drum Solid, DL = Drum Liqui, T = Tissue, WI = Wine, L = Liquid, V = Vegetation, X = Other
Relinquished By Date/Time	Received By Date/Time	
Relinquished By Date/Time	Received By Date/Time	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL JTED70107
W05172
Due 06-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-54**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506 B	**Ice Chest No.** Smith 137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4K5		W	5-4-07	0858	1x20-mL P	Activity Scan	None
B1N4K5		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1N4K5		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4K5		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JWEPG	

Relinquished By Fluor Hanford R. T. SICKLE Print Sign	Date/Time 1410 MAY 04 2007	Received By Eric Darby Print Sign	Date/Time 1410 MAY 04 2007
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL JTE070107
W05172
Due 06-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-55**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506 8	**Ice Chest No.** SmL 137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4K6		W	5-4-07	0858	1x20-mL P	Activity Scan	None
B1N4K6		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1N4K6		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4K6		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JWEPK	

Relinquished By Fluor Hanford R. T. SICKLE Print / Sign	Date/Time 1410 MAY 04 2007	Received By Eric Darby Print / Eric Darby Sign	Date/Time 1410 MAY 04 2007
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-132**

Page 1 of 1

JTE070107 W05172 Due 06-18-07

Collector ~~Fluor Hanford R. P. FOX~~ Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506 8	**Ice Chest No.** SWL 137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4R9		W	5-4-07	0956	1x20-mL P	Activity Scan	None
B1N4R9		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1N4R9		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4R9		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JWEPD	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
~~Fluor Hanford~~ R. T. SICKLE			1410 MAY 04 2007	Eric Darby		Eric Darby	1410 MAY 04 2007
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil		DS	=	Drum Solid
SE	= Sediment		DL	=	Drum Liqui
SO	= Solid		T	=	Tissue
SL	= Sludge		WI	=	Wipe
W	= Water		L	=	Liquid
O	= Oil		V	=	Vegetation
A	= Air		X	=	Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL JTE070107
W05172
Due 06-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-140**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506 8	**Ice Chest No.** SML 137 **Temp.**
Shipped To (Lab) Severn Trent Incornorated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4T4		W	5-4-07	1036	1x20-mL P	Activity Scan	None
B1N4T4		W	↓	↓	3x1000-mL G/P	TC99_SEP_LSC: Tc-99 (1)	HCl to pH <2
B1N4T4		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4T4		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1N541		W			1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2) JWFA8	HNO3 to pH <2
~~B1N541~~		~~W~~			~~1x20-mL P~~	~~Activity Scan~~ 4-10-07 DF	None
						JWEPQ	

Relinquished By Fluor Hanford R. T. SICKLE Print Sign	Date/Time 1410 MAY 04 2007	Received By Eric Darby Print Eric Darby Sign	Date/Time 1410 MAY 04 2007
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL JTE070107
W05172
Due 06-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **W07-005-144**

Page 1 of 1

Collector Fluor Hanford R. T. SICKLE	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. W07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title RCRA, MAY 2007	HNF-N-506 9	**Ice Chest No.** SUM 137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol RCRA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N4T6		W	5-4-07	1230	1x20-mL P	Activity Scan	None
B1N4T6		W	↓	↓	1x4000-mL G/P	GAMMALL_GS: List-1 (9)	HNO3 to pH <2
B1N4T6		W			1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
B1N4T6		W			1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
B1N4T6		W			1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
						JWEPW	

Relinquished By Print: Fluor Hanford R. T. SICKLE Sign:	Date/Time 1140 MAY 04 2007	Received By Print: Eric Dorsey Sign:	Date/Time 1410 MAY 04 2007
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S	= Soil		DS	=	Drum Solid
SE	= Sediment		DL	=	Drum Liqui
SO	= Solid		T	=	Tissue
SL	= Sludge		WI	=	Wine
W	= Water		L	=	Liquid
O	= Oil		V	=	Vegetation
A	= Air		X	=	Other

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 5/4/07 1440

Client: PGW SDG #: WD5172 NA [ ] SAF #: W07-005 NA [ ]

Work Order Number: JTE070107 Chain of Custody # W07-005-46, 54, 55, 132, 140, 144

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 6
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape _____hazard labels
   _____custody seals ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition _____leaking
   _____broken _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [ ] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Ed Darby Date: 5/4/07 1410

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7E070109 W05172 Due 06-18-07

C.O.C. # **S07-003-331**

Page 1 of 1

Collector Fluor Hanford F.M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	HNF-N-506-6	**Ice Chest No.** Skins. **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MF90		W	5/4/7	1207	1x20-mL P	Activity Scan	None
B1MF90		W	↓	↓	3x1000-mL P	TRITIUM_ELECT_LSC_LL: H-3 (1)	None
						JWEPI	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
	Fluor Hanford F.M. HALL	MAY 04 2007	1300	Elsie Dooley	Elsie Dooley	MAY 04 2007	1300
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7E070109 W05172 Due 06-18-07

C.O.C. # **S07-003-339**

Page 1 of 1

Collector ~~Fluor Hanford~~ T M HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	HNF-N-506-6	**Ice Chest No.** SKins **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MDN5		W	5/4/7	1036	1x20-mL P	Activity Scan	None
B1MDN5		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MDN5		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JWERS	

Relinquished By Print ~~Fluor Hanford~~ T M HALL Sign	Date/Time MAY 04 2007 1300	Received By Print Erie Darby Sign E Darby	Date/Time MAY 04 2007 1300
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wipe	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

J7E070109 W05172 Due 06-18-07

C.O.C. # S07-003-345

Page 1 of 1

Collector Fluor Hanford E. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	HNF-N-506-6	**Ice Chest No.** Skins **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MDN7		W	5/4/7	1123	1x20-mL P	Activity Scan	None
B1MDN7		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MDN7		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JWEPG	

	Print	Sign	Date/Time
Relinquished By	Fluor Hanford E. M. HALL	MAY 04 2007	1300
Received By	Eric Darby	E Darby	MAY 04 2007 1300
Relinquished By			Date/Time
Received By			Date/Time
Relinquished By			Date/Time
Received By			Date/Time
Relinquished By			Date/Time
Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) Disposed By Date/Time

PNNL

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

JTE070109 W05172 Due 06.18.07

C.O.C. # S07-003-346

Page 1 of 1

Collector Fluor Hanford E M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-003	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MARCH 2007	HNF - N - 506 - 6	**Ice Chest No.** SKins **Temp.**
Shipped To (Lab) Severn Trent Incornorated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS

** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐

All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.

WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MDN8		W	5/4/7	1123	1x20-mL P	Activity Scan	None
B1MDN8		W	↓	↓	1x1000-mL P	9310_ALPHABETA_GPC: Alpha + Beta (2)	HNO3 to pH <2
B1MDN8		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JWEP8	

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
Fluor Hanford E M. HALL		MAY 0 4 2007	1300	Eric Darby		MAY 0 4 2007	1300
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 5/4/07

Client: PGW SDG #: W05172 NA [ ] SAF #: 507-003 NA [ ]

Work Order Number: JTE070109 Chain of Custody # 507-003-331, 339, 345, 346

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: _____
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Ea Darby Date: 5/4/07 1300

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL JTE070112
W05172
Due 06-18-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **S07-004-296**

Page 1 of 1

Collector Fluor Hanford F. M. HALL	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-004	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, APRIL 2007	HMF - M - Sco - 6	**Ice Chest No.** SKins **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1MRM5		W	5/4/7	0920	1x20-mL P	Activity Scan	None
B1MRM5		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1MRM5		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
						JWEQK	

Relinquished By Print Fluor Hanford F. M. HALL Sign	Date/Time 1300	Received By Print Erica Darby Sign MAY 04 2007	Date/Time 1300
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION Disposal Method (e.g., Return to customer, per lab procedure, used in process) | Disposed By | Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 5/4/07 1300

Client: PGW SDG #: W05172 NA [ ] SAF #: 507-004 NA [ ]

Work Order Number: JJE070112 Chain of Custody # 507-004 296

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [ ] Yes [ ] No [ ]
8. Samples have:
   _____tape _____hazard labels
   _____custody seals ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition _____leaking
   _____broken _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [ ] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: Ev Darby Date: 5/4/07 1300

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL JTE080312
W05172
Due 06.21.07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # **I07-044-126**

Page 1 of 1

Collector Fluor Hanford D. E. PARCHEN	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. I07-044	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title 2ZP1-LOI, MAY 2007	HNF-N-506 8	**Ice Chest No.** SML-137 **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol CERCLA	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N357		W	5-7-07	1059	1x20-mL P	Activity Scan	None
B1N357		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1N357		W	↓	↓	1x500-mL P	TC99_ETVDSK_LSC: Tc-99 (1)	HCl to pH <2
						JWH5W	

Relinquished By Print: Fluor Hanford D. E. PARCHEN Sign:	Date/Time: MAY 07 2007 1510	Received By Print: D. Smith Sign: S Smith	Date/Time: MAY 07 2007 1510
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

Matrix *

S = Soil		DS = Drum Solid	
SE = Sediment		DL = Drum Liqui	
SO = Solid		T = Tissue	
SL = Sludge		WI = Wine	
W = Water		L = Liquid	
O = Oil		V = Vegetation	
A = Air		X = Other	

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 05-07-07 1510

Client: P&W SDG #: W05172 NA [ ] SAF #: I07-044 NA [ ]

Work Order Number: JTE080312 Chain of Custody # I07-044-126

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape _____hazard labels
   _____custody seals 1 appropriate samples labels
9. Samples are:
   1 in good condition _____leaking
   _____broken _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: L. Smith Date: 05-07-07 15:10

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

PNNL J7E080313 W05172 Due 06-21-07

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

C.O.C. # S07-005-70

Page 1 of 1

Collector DURATEK K. J. YOUNG	**Contact/Requester** Dot Stewart	**Telephone No.** 509-376-5056 **MSIN** **FAX**
SAF No. S07-005	**Sampling Origin** Hanford Site	**Purchase Order/Charge Code**
Project Title SURV, MAY 2007	Logbook: HNF-N-506-6	**Ice Chest No.** SKiWS **Temp.**
Shipped To (Lab) Severn Trent Incorporated, Richland	**Method of Shipment** Govt. Vehicle	**Bill of Lading/Air Bill No.**
Protocol SURV	**Priority:** 45 Days	**Offsite Property No.**

POSSIBLE SAMPLE HAZARDS/REMARKS
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL INSTRUCTIONS **Hold Time** Total Activity Exemption: Yes ☑ No ☐
All Labs except WSCF: Batch all samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.
WSCF: Batch all GW samples submitted into one SDG, daily closure.

Sample No.	Lab ID	*	Date	Time	No/Type Container	Sample Analysis	Preservative
B1N3Y1		W	5/7/07	0936	1x20-mL P	Activity Scan	None
B1N3Y1		W	↓	↓	1x1000-mL P	906.0_H3_LSC: Tritium (1)	None
B1N3Y1		W	↓	↓	2x4000-mL G/P	I129LL_SEP_LEPS_GS_LL: I-129 (1)	None
B1N3Y1		W	↓	↓	1x500-mL G/P	UTOT_KPA: Uranium (1)	HNO3 to pH <2
						JWH50	

K. Wall 5/7/07

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time
DURATEK K. J. YOUNG			MAY 07 2007 1510		S. Smith	S. Smith	MAY 07 2007 1510
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time
Relinquished By			Date/Time	Received By			Date/Time

Matrix *

S	= Soil		DS	=	Drum Solid
SE	= Sediment		DL	=	Drum Liqui
SO	= Solid		T	=	Tissue
SL	= Sludge		WI	=	Wipe
W	= Water		L	=	Liquid
O	= Oil		V	=	Vegetation
A	= Air		X	=	Other

FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)	Disposed By	Date/Time

SEVERN TRENT STL

Sample Check-in List

Date/Time Received: 05-07-07 15:10

Client: PW SDG #: W05172 NA [ ] SAF #: 507-005 NA [ ]

Work Order Number: JTE080313 Chain of Custody # 507-005-70

Shipping Container ID: _____ Air Bill # _____

1. Custody Seals on shipping container intact? NA [ ] Yes [✓] No [ ]
2. Custody Seals dated and signed? NA [ ] Yes [✓] No [ ]
3. Chain of Custody record present? Yes [✓] No [ ]
4. Cooler temperature: _____ NA [✓] 5. Vermiculite/packing materials is NA [✓] Wet [ ] Dry [ ]
6. Number of samples in shipping container: 1
7. Sample holding times exceeded? NA [✓] Yes [ ] No [ ]
8. Samples have:
   _____tape
   _____custody seals
   _____hazard labels
   ✓ appropriate samples labels
9. Samples are:
   ✓ in good condition
   _____broken
   _____leaking
   _____have air bubbles
   (Only for samples requiring head space)
10. Sample pH taken? NA [ ] pH<2 [✓] pH>2 [✓] pH>9 [ ]
11. Sample Location, Sample Collector Listed? * Yes [✓] No [ ]
    *For documentation only. No corrective action needed.
12. Were any anomalies identified in sample receipt? Yes [ ] No [✓]
13. Description of anomalies (include sample numbers): _____

Sample Custodian: L. Smith Date: 05-07-07 1510

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

[ ] No action necessary; process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev. 5

6/13/2007 11:41:36 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Pipet #: 235

AnalyDueDate: 06/18/2007

Sep1 DT/Tm Tech:

Batch: 7129617 **WATER** **pCi/L** **PM, Quote: SA , 57671**

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ/APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JWA58-1-AC J7E040306-1-SAMP 05/03/2007 08:46	199.50g,in AmtRec: 20ML,2XLP,2X4LP	#Containers: 5		1.5	53.1	.50	10D	2021	6/18/07 DP Scr: Alpha: -2.37E-04 uCi/Sa	Beta: 1.92E-03 uCi/Sa
2 JWEPQ-1-AC J7E070107-5-SAMP 05/04/2007 10:36	111.30g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			34.0	100	10F	1915	Scr: Alpha: 2.43E-04 uCi/Sa	Beta: -1.22E-04 uCi/Sa
3 JWEP5-1-AA J7E070109-2-SAMP 05/04/2007 10:36	200.70g,in AmtRec: 20ML,500MLP,LP	#Containers: 3			55.2	.50	10A	2021	Scr: Alpha: 3.90E-07 uCi/Sa	Beta: 1.22E-04 uCi/Sa
4 JWEP5-1-AF-X J7E070109-2-DUP 05/04/2007 10:36	201.80g,in AmtRec: 20ML,500MLP,LP	#Containers: 3			54.0		10C	2021	Scr: Alpha: 3.90E-07 uCi/Sa	Beta: 1.22E-04 uCi/Sa
5 JWEP6-1-AA J7E070109-3-SAMP 05/04/2007 11:23	200.60g,in AmtRec: 20ML,500MLP,LP	#Containers: 3			54.7		10F	2021	Scr: Alpha: 1.98E-04 uCi/Sa	Beta: 5.67E-05 uCi/Sa
6 JWEP8-1-AA J7E070109-4-SAMP 05/04/2007 11:23	199.40g,in AmtRec: 20ML,500MLP,LP	#Containers: 3			0.8		10A	2125	Scr: Alpha: 1.02E-05 uCi/Sa	Beta: 1.70E-04 uCi/Sa
7 JWFA8-1-AA J7E070107-7-SAMP 05/04/2007 12:20	198.80g,in AmtRec: LP	#Containers: 1			36.9		10C		Scr: Alpha: -6.48E-05 uCi/Sa	Beta: 8.13E-05 uCi/Sa

Sample Preparation/Analysis

AZ Gross Alpha PrpRC5014
S7 Gross Alpha by GPC using Am-241 curve
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

AnalyDueDate: 06/18/2007

Batch: 7129617 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JWL3P-1-AA-B J7E090000-617-BLK 05/04/2007 10:36	AmtRec:	198.50g,in	#Containers: 1	1.5	0.6	100	102	0934	6/19/07 Scr: Alpha: Beta:	
9 JWL3P-1-AC-C J7E090000-617-LCS 05/04/2007 10:36	AmtRec:	200.80g,in	ASD4210 05/17/07,pd 02/09/06,r #Containers: 1	↓	0.9	↓	102		Scr: Alpha: Beta:	

Comments: JWEPQ-SAMP "Comments. No sample sent labeled for alpha/beta. Used a bottle labeled for tech-99. JB 6/13/07" Aliquot reduced due to weight screen, PH < 2.0 JS 6-13-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JWA581AC-SAMP Constituent List:
ALPHA RDL:3 pCi/L LCL: UCL: RPD:
JWL3P1AA-BLK:
ALPHA RDL:3 pCi/L LCL: UCL: RPD:
JWL3P1AC-LCS:
Am-241 RDL: pCi/L LCL:70 UCL:130 RPD:20

JWA581AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3P1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3P1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/19/2007 3:34:21 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/19/2006, 6/24/2007, Batch: '7129617', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7129617						
AC		**CalcC**	**BockJ**	6/13/2007 11:30:24		
SC			wagarr	IsBatched	5/9/2007 4:41:37 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	6/13/2007 11:30:24 AM	RICH-RC-5016 Revision 7
SC			BockJ	Prep1C	6/13/2007 11:41:41 AM	RICH-RC-5014 REVISION 7
SC			AshworthA	InPrep2	6/15/2007 4:09:03 PM	RICH-RC-5014 REVISION 7
SC			AshworthA	Prep2C	6/18/2007 3:16:18 PM	RICH-RC-5014 REVISION 7
SC			DAWKINSO	InCnt1	6/18/2007 3:32:18 PM	RICH-RD-0003 REVISION 5
SC			BlackCL	CalcC	6/19/2007 9:20:06 AM	RICH-RD-0003 REVISION 5
AC			**BockJ**	6/13/2007 11:41:41		
AC			**AshworthA**	6/15/2007 4:09:03 PM		
AC			**AshworthA**	6/18/2007 3:16:18 PM		
AC			**DAWKINSO**	6/18/2007 3:32:18 PM		
AC			**BlackCL**	6/19/2007 9:20:06		

AC: Accepting Entry; SC: Status Change

6/13/2007 11:55:56 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 06/18/2007 W05172

Sep1 DT/Tm Tech:

Batch: 7129618 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ /APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JWA58-1-AD J7E040306-1-SAMP 05/03/2007 08:46		198.10g,in AmtRec: 20ML,2XLP,2X4LP	#Containers: 5	1.5	50.6	100	31A Scr:	~~2003~~ 1826 6/14/07 ... Alpha: -2.37E-04 uCi/Sa	6/18/07 ... Beta: 1.92E-03 uCi/Sa	
2 JWEPC-1-AC J7E070107-1-SAMP 05/04/2007 11:30		75.40g,in AmtRec: 20ML,500ML,5XLP,4LP	#Containers: 8		46.4	200	28B Scr:	2003 ~~203~~ 6/18/07 ... Alpha: 1.76E-03 uCi/Sa	Beta: -1.69E-03 uCi/Sa	
3 JWEPQ-1-AD J7E070107-5-SAMP 05/04/2007 10:36		199.60g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6		74.1	100	31B Scr:	1826 ~~2003~~ 6/18/07 ... Alpha: 2.43E-04 uCi/Sa	Beta: 1.22E-04 uCi/Sa	
4 JWEP5-1-AC J7E070109-2-SAMP 05/04/2007 10:36		198.40g,in AmtRec: 20ML,500MLP,LP	#Containers: 3		106.0		31C Scr:	Alpha: 3.90E-07 uCi/Sa	Beta: 1.22E-04 uCi/Sa	
5 JWEP6-1-AC J7E070109-3-SAMP 05/04/2007 11:23		184.90g,in AmtRec: 20ML,500MLP,LP	#Containers: 3		93.3		31D Scr:	Alpha: 1.98E-04 uCi/Sa	Beta: 5.67E-05 uCi/Sa	
6 JWEP6-1-AE-X J7E070109-3-DUP 05/04/2007 11:23		186.10g,in AmtRec: 20ML,500MLP,LP	#Containers: 3		101.8		32B Scr:	Alpha: 1.98E-04 uCi/Sa	Beta: 5.67E-05 uCi/Sa	
7 JWEP8-1-AC J7E070109-4-SAMP 05/04/2007 11:23		198.70g,in AmtRec: 20ML,500MLP,LP	#Containers: 3		0.3		32C Scr:	~~2003~~ 6/18/07 ... 1826 Alpha: 1.02E-05 uCi/Sa	Beta: 1.70E-04 uCi/Sa	

STL Richland
Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep_SamplePrep v4.8.26

6/13/2007 11:55:59 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory , Pacific Northwest National Lab

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 06/18/2007

Sep1 DT/Tm Tech:

Batch: 7129618 **WATER** **pCi/L** **PM, Quote: SA , 57671**

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JWFA8-1-AC J7E070107-7-SAMP 05/04/2007 12:20	199.70g,in AmtRec: LP		#Containers: 1	1.5	66.6	100	32A	1826 Scr:	6/18/07 JD Alpha: -6.48E-05 uCi/Sa	Beta: 8.13E-05 uCi/Sa
9 JWL3Q-1-AA-B J7E090000-618-BLK 05/04/2007 11:23	201.10g,in AmtRec:		#Containers: 1		0.2	200	28C	2003 Scr:	Alpha:	Beta:
10 JWL3Q-1-AC-C J7E090000-618-LCS 05/04/2007 11:23	199.20g,in AmtRec:	BESB3069 03/23/07,pd 08/08/06,r	#Containers: 1		0.6		28D	Scr:	Alpha:	Beta:

Comments: JWEPQ-SAMP "Comments. No sample sent labeled for alpha/beta. Used a bottle labeled for tech-99. JB 6/13/07"
Aliquots that are reduced are due to Weight Screens. PH < 2.0 JB 6-13-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JWA581AD-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JWL3Q1AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
JWL3Q1AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20

JWA581AD-SAMP Calc Info:

Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JWL3Q1AA-BLK:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
JWL3Q1AC-LCS:				
Uncert Level (#s).: 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Sample Preparation/Analysis

Balance Id:1120482733

BC Gross Beta PrpRC5014
S8 Gross Beta by GPC using Sr/Y-90 curve
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 06/18/2007

Sep1 DT/Tm Tech:

Batch: 7129618 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 6/19/2006, 6/24/2007, Batch: '7129618', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7129618							
AC			CalcC	**BockJ**	6/13/2007 11:44:48		
SC				wagarr	IsBatched	5/9/2007 4:41:37 PM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep	6/13/2007 11:44:48 AM	RICH-RC-5016 Revision 7
SC				BockJ	Prep1C	6/13/2007 11:56:01 AM	RICH-RC-5014 REVISION 7
SC				AshworthA	InPrep2	6/15/2007 4:09:09 PM	RICH-RC-5014 REVISION 7
SC				AshworthA	Prep2C	6/18/2007 3:16:37 PM	RICH-RC-5014 REVISION 7
SC				DAWKINSO	InCnt1	6/18/2007 3:32:29 PM	RICH-RD-0003 REVISION 5
SC				DAWKINSO	CalcC	6/18/2007 10:12:52 PM	RICH-RD-0003 REVISION 5
AC				**BockJ**	6/13/2007 11:56:01		
AC				**AshworthA**	6/15/2007 4:09:09 PM		
AC				**AshworthA**	6/18/2007 3:16:37 PM		
AC				**DAWKINSO**	6/18/2007 3:32:29 PM		
AC				**DAWKINSO**	6/18/2007 10:12:52		

AC: Accepting Entry; SC: Status Change

6/13/2007 12:59:28 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 06/18/2007 W0517Z

Sep1 DT/Tm Tech:

Batch: 7129619 **WATER** **pCi/L**

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ / APA

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JWCG1-1-AA J7E040342-1-SAMP 05/03/2007 12:13	1992.10g,in	AmtRec: 20ML,2X500ML,4LP	#Containers: 4	100mL	100		G15	1842	6/20/07 DP	Scr: Alpha: 4.31E-06 uCi/Sa Beta: -9.90E-07 uCi/Sa
2 JWCG1-1-AE-X J7E040342-1-DUP 05/03/2007 12:13	1931.20g,in	AmtRec: 20ML,2X500ML,4LP	#Containers: 4				G14	2353		Scr: Alpha: 4.31E-06 uCi/Sa Beta: -9.90E-07 uCi/Sa
3 JWCHW-1-AC J7E040342-2-SAMP 05/03/2007 09:55	1997.00g,in	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5				G15	2042	6/20/07 DP	Scr: Alpha: 1.80E-03 uCi/Sa Beta: -2.11E-04 uCi/Sa
4 JWCJC-1-AC J7E040342-3-SAMP 05/03/2007 10:56	2002.00g,in	AmtRec: 20ML,500ML,4XLP,4LP	#Containers: 7				G15	2350		Scr: Alpha: 3.68E-03 uCi/Sa Beta: 4.36E-04 uCi/Sa
5 JWCJM-1-AC J7E040342-4-SAMP 05/03/2007 12:42	2000.60g,in	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5				G10	2354		Scr: Alpha: 1.80E-03 uCi/Sa Beta: 2.43E-04 uCi/Sa
6 JWEPC-1-AD J7E070107-1-SAMP 05/04/2007 11:30	2001.70g,in	AmtRec: 20ML,500ML,5XLP,4LP	#Containers: 8				G13	0008		Scr: Alpha: 1.76E-03 uCi/Sa Beta: -1.69E-03 uCi/Sa
7 JWEPW-1-AC J7E070107-6-SAMP 05/04/2007 12:20	1999.40g,in	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5				G6	0009		Scr: Alpha: 4.40E-03 uCi/Sa 2.5E-01L Beta: 6.20E-04 uCi/Sa

6/13/2007 12:59:31 PM

Sample Preparation/Analysis

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/18/2007

Sep1 DT/Tm Tech:

Batch: 7129619 pCi/L
SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JWL3T-1-AA-B J7E090000-619-BLK 05/03/2007 12:13		1997.00g,in AmtRec:			100 mL	100	G8	0010 Scr:	6/20/07 DN Alpha:	Beta:
9 JWL3T-1-AC-C J7E090000-619-LCS 05/03/2007 12:13		1999.90g,in AmtRec:	QCAG1369 05/30/07,pd 03/07/05,r #Containers: 1				G7	2354 Scr:	b Alpha:	Beta:

Comments: PH < 2.0 YB 6-13-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JWCG11AA-SAMP Constituent List:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

JWL3T1AA-BLK:

Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:
Cs-137	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:	UCL:	RPD:
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:.00E+00	pCi/L	LCL:	UCL:	RPD:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:

JWL3T1AC-LCS:

Cs-137	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20
K-40	RDL:6	pCi/L	LCL:70	UCL:130	RPD:20	Ra-226	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
RA-228	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20	RA-228DA	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20
U-238	RDL:--	pCi/L	LCL:70	UCL:130	RPD:20						

JWCG11AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3T1AA-BLK:

Sample Preparation/Analysis

AW Gamma PrpRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Balance Id:1120482733

Pipet #: _____

AnalyDueDate: 06/18/2007

Sep1 DT/Tm Tech:

Batch: 7129619 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JWL3T1AC-LCS:

Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 6/21/2006, 6/26/2007, Batch: '7129619', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7129619							
AC			**CalcC**	**BockJ**	6/13/2007 12:45:33		
SC				wagarr	IsBatched	5/9/2007 4:41:37 PM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep	6/13/2007 12:45:33 PM	RICH-RC-5016 Revision 7
SC				BockJ	Prep1C	6/13/2007 12:59:33 PM	RICH-RC-5017 REVISION 6
SC				AshworthA	InPrep2	6/19/2007 9:09:26 AM	RICH-RC-5017 REVISION 6
SC				AshworthA	Prep2C	6/20/2007 4:28:56 PM	RICH-RC-5017 REVISION 6
SC				DAWKINSO	InCnt1	6/20/2007 5:05:45 PM	RICH-RD-0007 REVISION 6
SC				StringerR	CalcC	6/21/2007 7:55:01 AM	RICH-RD-0007 REVISION 6
AC				**BockJ**	6/13/2007 12:59:33		
AC				**AshworthA**	6/19/2007 9:09:26		
AC				**AshworthA**	6/20/2007 4:28:56 PM		
AC				**DAWKINSO**	6/20/2007 5:05:45 PM		
AC				**StringerR**	6/21/2007 7:55:01		

AC: Accepting Entry; SC: Status Change

6/13/2007 1:14:10 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 06/18/2007 W05172

Sep1 DT/Tm Tech:

Batch: 7129613 **WATER** **pCi/L**

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JWA5N-1-AA J7E040299-1-SAMP 05/03/2007 11:27		3905.30g,in AmtRec: 20ML,2X4LP	ITA6381 06/12/07 #Containers: 3		35.7	100	L2 Scr:	1358 Alpha: 1.33E-03 uCi/Sa	6/15/07 Beta: -7.11E-04 uCi/Sa	
2 JWA5N-1-AC-X J7E040299-1-DUP 05/03/2007 11:27		3884.10g,in AmtRec: 20ML,2X4LP	ITA6382 06/12/07 #Containers: 3		35.0		L4 Scr:	1400 Alpha: 1.33E-03 uCi/Sa	Beta: -7.11E-04 uCi/Sa	
3 JWA58-1-AE J7E040306-1-SAMP 05/03/2007 08:46		3934.90g,in AmtRec: 20ML,2XLP,2X4LP	ITA6383 06/12/07 #Containers: 5		35.7		L5 Scr:	1400 Alpha: -2.37E-04 uCi/Sa	Beta: 1.92E-03 uCi/Sa	
4 JWEQK-1-AC J7E070112-1-SAMP 05/04/2007 09:20		3907.10g,in AmtRec: 20ML,LP,2X4LP	ITA6384 06/12/07 #Containers: 4		34.0		L2 Scr:	1615 Alpha: 1.65E-03 uCi/Sa	6/15/07 r Beta: -1.22E-03 uCi/Sa	
5 JWH5W-1-AA J7E080312-1-SAMP 05/07/2007 10:59		3884.20g,in AmtRec: 20ML,500ML,2X4LP	ITA6385 06/12/07 #Containers: 4		35.0		L4 Scr:	1618 Alpha: 1.01E-03 uCi/Sa	6/15/07 r Beta: 2.30E-04 uCi/Sa	
6 JWH50-1-AC J7E080313-1-SAMP 05/07/2007 09:36		3870.60g,in AmtRec: 20ML,500ML,LP,2X4LP	ITA6386 06/12/07 #Containers: 5		34.6		L5 Scr:	1619 Alpha: 9.72E-04 uCi/Sa	6/15/07 r Beta: -2.42E-04 uCi/Sa	
7 JWL3M-1-AA-B J7E090000-613-BLK 05/03/2007 11:27		3998.50g,in AmtRec:	ITA6387 06/12/07 #Containers: 1		34.4		L2 Scr:	1809 Alpha:	6/15/07 MO Beta:	

Sample Preparation/Analysis

Balance Id:1120482733

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 06/18/2007

Sep1 DT/Tm Tech:

Batch: 7129613 pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JWL3M-1-AC-C ✓ J7E090000-613-LCS		3997.80g,in	ISD0753 06/13/07		35.8	100	L4	1812	6/14/07 OKD	

05/03/2007 11:27 AmtRec: #Containers: 1 Scr: Alpha: Beta:

Comments: PH - neutral GB 6-13-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JWA5N1AA-SAMP Constituent List:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
JWL3M1AA-BLK:
I-129 RDL:1.00E+00 pCi/L LCL: UCL: RPD:
JWL3M1AC-LCS:
I-129 RDL:5 pCi/L LCL:70 UCL:130 RPD:20

JWA5N1AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3M1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3M1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/18/2007 2:02:02 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/18/2006, 6/23/2007, Batch: '7129613', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7129613						
AC		**CalcC**	**BockJ**	6/13/2007 12:04:23		
SC			wagarr	IsBatched	5/9/2007 4:41:37 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	6/13/2007 12:04:23 PM	RICH-RC-5016 Revision 7
SC			BockJ	Prep1C	6/13/2007 1:14:14 PM	RICH-RC-5017 REVISION 6
SC			BostedD	InPrep2	6/13/2007 1:18:13 PM	RICHRC5025 REV3
SC			BostedD	Prep2C	6/15/2007 12:15:43 PM	RICHRC5025 REV3
SC			BlackCL	InCnt1	6/15/2007 12:18:52 PM	RICH-RD-0007 REVISION 6
SC			DAWKINSO	CalcC	6/15/2007 7:34:51 PM	RICH-RD-0007 REVISION 6
AC			**BockJ**	6/13/2007 1:14:14 PM		
AC			**BostedD**	6/13/2007 1:18:13 PM		
AC			**BostedD**	6/15/2007 12:15:43		
AC			**BlackCL**	6/15/2007 12:18:52		
AC			**DAWKINSO**	6/15/2007 7:34:51 PM		

AC: Accepting Entry; SC: Status Change

SEVERN TRENT STL

*** RE-COUNT REQUEST ***

DUE DATE 6/21/07

CUSTOMER RMW

ANALYSIS TC99

MATRIX WATER

LOT NUMBER JF60405U2

SAMPLE DELIVERY GROUP

OLD BATCH NUMBER 712961

	LAB SAMPLE ID	REASON FOR REQUEST & ANALYSIS COMMENTS
1)	ALL	TSE - Please Shake, Wipe, Recount
2)		
3)		
4)		
5)		
6)		
7)		
8)		
9)		
10)		
11)		
12)		
13)		
14)		
15)		
16)		
17)		
18)		
19)		
20)		

6/20/2007 12:49:03 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:

Pipet #: _____

AnalyDueDate: 06/18/2007

Sep1 DT/Tm Tech:

Batch: 7171388 WATER pCi/L **PM, Quote: SA , 57671**

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech:

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

1 JWCG1-2-AC

J7E040342-1-SAMP

05/03/2007 12:13 AmtRec: 20ML,2X500ML,4LP #Containers: 4 Scr: Alpha: 4.31E-06 uCi/Sa Beta: -9.90E-07 uCi/Sa

2 JWCHW-2-AD

J7E040342-2-SAMP

05/03/2007 09:55 AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5 Scr: Alpha: 1.80E-03 uCi/Sa Beta: -2.11E-04 uCi/Sa

3 JWCJM-2-AD

J7E040342-4-SAMP

05/03/2007 12:42 AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5 Scr: Alpha: 1.80E-03 uCi/Sa Beta: 2.43E-04 uCi/Sa

4 JWEPW-2-AD

J7E070107-6-SAMP

05/04/2007 12:20 AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5 Scr: Alpha: 4.40E-03 uCi/Sa 2.5E-01L Beta: 6.20E-04 uCi/Sa

5 JWEPW-2-AF-S

J7E070107-6-MS

05/04/2007 12:20 AmtRec: 20ML,2X500ML,LP,4LP #Containers: 5 Scr: Alpha: 4.40E-03 uCi/Sa 2.5E-01L Beta: 6.20E-04 uCi/Sa

6 JWH5W-2-AC

J7E080312-1-SAMP

05/07/2007 10:59 AmtRec: 20ML,500ML,2X4LP #Containers: 4 Scr: Alpha: 1.01E-03 uCi/Sa Beta: 2.30E-04 uCi/Sa

7 JWH5W-2-AD-X

J7E080312-1-DUP

05/07/2007 10:59 AmtRec: 20ML,500ML,2X4LP #Containers: 4 Scr: Alpha: 1.01E-03 uCi/Sa Beta: 2.30E-04 uCi/Sa

Sample Preparation/Analysis

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 06/18/2007

Batch: 7171388 **pCi/L**
SEQ Batch, Test: None

Balance Id:
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JWL3K-2-AA-B										
J7E090000-611-BLK										
05/07/2007 10:59			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:
9 JWL3K-2-AC-C										
J7E090000-611-LCS										
05/07/2007 10:59			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:
10 JWL3K-2-AD-BN										
J7E090000-611-IBLK										
05/07/2007 10:59			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JWCG12AC-SAMP Constituent List:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JWEPW2AF-MS:

JWL3K2AA-BLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:
JWL3K2AC-LCS:
Tc-99 RDL:15 pCi/L LCL:70 UCL:130 RPD:20
JWL3K2AD-IBLK:
Tc-99 RDL:15 pCi/L LCL: UCL: RPD:

JWCG12AC-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWEPW2AF-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Sample Preparation/Analysis

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 06/18/2007

Batch: 7171388 pCi/L
SEQ Batch, Test: None

Balance Id:
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

JWL3K2AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3K2AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3K2AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/22/2007 10:35:49 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/22/2006, 6/27/2007, Batch: '7171388', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7171388						
AC		**CalcC**	**StringerR**	6/20/2007 1:04:28 PM		
SC			antonsonl	IsBatched	6/20/2007 11:39:56 AM	ICOC_RADCALC v4.8.26
SC			StringerR	InCnt1	6/20/2007 1:04:28 PM	RICH-RD-0001 REVISION 4
SC			BlackCL	CalcC	6/21/2007 10:39:16 AM	RICH-RD-0001 REVISION 4
AC			**BlackCL**	6/21/2007 10:39:16		

6/13/2007 10:08:20 AM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 06/18/2007 W05172

Sep1 DT/Tm Tech:

Batch: 7129612 **WATER** **pCi/L** **PM, Quote: SA , 57671**

Sep2 DT/Tm Tech:

SEQ Batch, Test: None All Tests: 7129611 FPS5, 7129612 AMS5, 7129616 DHSS, 7129619 AWTA, 7129620 ARS6,

Prep Tech: BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 **JWCJC-1-AF** J7E040342-3-SAMP 05/03/2007 10:56		124.80g,in AmtRec: 20ML,500ML,4XLP,4LP	#Containers: 7	L60		Scr:	Alpha: 3.68E-03 uCi/Sa	Beta: 4.36E-04 uCi/Sa
2 **JWEPC-1-AE** J7E070107-1-SAMP 05/04/2007 11:30		126.80g,in AmtRec: 20ML,500ML,5XLP,4LP	#Containers: 8			Scr:	Alpha: 1.76E-03 uCi/Sa	Beta: -1.69E-03 uCi/Sa
3 **JWEPC-1-AG-X** J7E070107-1-DUP 05/04/2007 11:30		125.00g,in AmtRec: 20ML,500ML,5XLP,4LP	#Containers: 8			Scr:	Alpha: 1.76E-03 uCi/Sa	Beta: -1.69E-03 uCi/Sa
4 **JWEPG-1-AC** J7E070107-2-SAMP 05/04/2007 08:58		126.80g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: -4.63E-05 uCi/Sa	Beta: 8.51E-04 uCi/Sa
5 **JWEPG-1-AE-S** J7E070107-2-MS 05/04/2007 08:58		124.50g,in AmtRec: 20ML,500ML,4XLP	TCSG1822 06/05/07,pd 01/10/06,r #Containers: 6			Scr:	Alpha: -4.63E-05 uCi/Sa	Beta: 8.51E-04 uCi/Sa
6 **JWEPK-1-AC** J7E070107-3-SAMP 05/04/2007 08:58		125.50g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: 4.38E-04 uCi/Sa	Beta: -1.22E-04 uCi/Sa
7 **JWEPP-1-AC** J7E070107-4-SAMP 05/04/2007 09:56		127.10g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: 6.02E-05 uCi/Sa	Beta: 6.57E-04 uCi/Sa

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 06/18/2007

Sep1 DT/Tm Tech:

Batch: 7129612 **WATER** **pCi/L** **PM, Quote: SA , 57671**

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JWEPQ-1-AE J7E070107-5-SAMP 05/04/2007 10:36		125.40g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6	100		Scr:	Alpha: 2.43E-04 uCi/Sa	Beta: -1.22E-04 uCi/Sa
9 JWL3L-1-AA-B J7E090000-612-BLK 05/04/2007 11:30		125.60g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
10 JWL3L-1-AC-C J7E090000-612-LCS 05/04/2007 11:30		125.00g,in AmtRec:	TCSE2117 05/09/07,pd 01/10/06,r #Containers: 1			Scr:	Alpha:	Beta:
11 JWL3L-1-AD-BN J7E090000-612-IBLK 05/04/2007 11:30		AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:

Comments: PH < 2.0 JB 6-13-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JWCJC1AF-SAMP Constituent List:

Tc-99	RDL:1.50E+01	pCi/L	LCL:70	UCL:130	RPD:20

JWEPG1AE-MS:

JWL3L1AA-BLK:

Tc-99	RDL:1.50E+01	pCi/L	LCL:	UCL:	RPD:

JWL3L1AC-LCS:

Tc-99	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20

Sample Preparation/Analysis

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
5I CLIENT: HANFORD

Balance Id:

Pipet #: _____

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech:

AnalyDueDate: 06/18/2007

Batch: 7129612 **pCi/L**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

JWL3L1AD-IBLK:
Tc-99 RDL:1.50E+01 pCi/L LCL: UCL: RPD:

JWCJC1AF-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JWEPG1AE-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JWL3L1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JWL3L1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

JWL3L1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/20/2007 4:01:51 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/20/2006, 6/25/2007, Batch: '7129612', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting		Comments
7129612						
AC			**CalcC**	**BockJ**	6/13/2007 9:53:34	
SC				wagarr	IsBatched 5/9/2007 4:41:37 PM	ICOC_RADCALC v4.8.26
SC				BockJ	InPrep 6/13/2007 9:53:34 AM	RICH-RC-5016 Revision 7
SC				BockJ	Prep1C 6/13/2007 10:08:22 AM	RICH-RC-5016 REVISION 7
SC				FABREM	Sep1C 6/18/2007 11:30:15 AM	RICH-RC-5078 REV 4
SC				BlackCL	InCnt1 6/18/2007 11:39:36 AM	RICH-RD-0001 REVISION 4
SC				BlackCL	CalcC 6/19/2007 12:14:36 PM	RICH-RD-0001 REVISION 4
AC				**BockJ**	6/13/2007 10:08:22	
AC				**FABREM**	6/18/2007 11:30:15	
AC				**BlackCL**	6/18/2007 11:39:36	
AC				**BlackCL**	6/19/2007 12:14:36	

AC: Accepting Entry; SC: Status Change

5/9/2007 4:39:07 PM

Sample Preparation/Analysis

Balance Id: 12445

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Pipet #:

AnalyDueDate: 06/18/2007 W05172

Sep1 DT/Tm Tech: 6-15-07 Tom

Batch: 7129620 WATER pCi/L

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JWA58-1-AA J7E040306-1-SAMP 05/03/2007 08:46	AmtRec: 20ML,2XLP,2X4LP	#Containers: 5			Scr:	Alpha:	Beta:	
2 JWCHW-1-AA J7E040342-2-SAMP 05/03/2007 09:55	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha:	Beta:	
3 JWCJC-1-AA J7E040342-3-SAMP 05/03/2007 10:56	AmtRec: 20ML,500ML,4XLP,4LP	#Containers: 7			Scr:	Alpha:	Beta:	
4 JWCJM-1-AA J7E040342-4-SAMP 05/03/2007 12:42	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha:	Beta:	
5 JWEPC-1-AA J7E070107-1-SAMP 05/04/2007 11:30	AmtRec: 20ML,500ML,5XLP,4LP	#Containers: 8			Scr:	Alpha:	Beta:	
6 JWEPG-1-AA J7E070107-2-SAMP 05/04/2007 08:58	AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha:	Beta:	
7 JWEPK-1-AA J7E070107-3-SAMP 05/04/2007 08:58	AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha:	Beta:	

5/9/2007 4:39:09 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 06/18/2007

Batch: 7129620 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 6-15-07 tm
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JWEPK-1-AE-X J7E070107-3-DUP 05/04/2007 08:58	AmtRec: 20ML,500ML,4XLP	#Containers: 6				Scr:	Alpha:	Beta:
9 JWEPP-1-AA J7E070107-4-SAMP 05/04/2007 09:56	AmtRec: 20ML,500ML,4XLP	#Containers: 6				Scr:	Alpha:	Beta:
10 JWEPQ-1-AA J7E070107-5-SAMP 05/04/2007 10:36	AmtRec: 20ML,500ML,4XLP	#Containers: 6				Scr:	Alpha:	Beta:
11 JWEPW-1-AA J7E070107-6-SAMP 05/04/2007 12:20	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5				Scr:	Alpha:	Beta:
12 JWEQK-1-AA J7E070112-1-SAMP 05/04/2007 09:20	AmtRec: 20ML,LP,2X4LP	#Containers: 4				Scr:	Alpha:	Beta:
13 JWH50-1-AA J7E080313-1-SAMP 05/07/2007 09:36	AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5				Scr:	Alpha:	Beta:
14 JWL3V-1-AA-B J7E090000-620-BLK 05/04/2007 08:58	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

5/9/2007 4:39:10 PM

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 06/18/2007

Batch: 7129620 pCi/L
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 6-15-07 bm
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 JWL3V-1-AC-C J7E090000-620-LCS 05/04/2007 08:58	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
16 JWL3V-1-AD-BX J7E090000-620-MBLK 05/04/2007 08:58	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
17 JWL3V-1-AE-CM J7E090000-620-MLCS 05/04/2007 08:58	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
18 JWL3V-1-AF-BN J7E090000-620-IBLK 05/04/2007 08:58	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
19 JWL3V-1-AG-BN J7E090000-620-IBLK 05/04/2007 08:58	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
20 JWL3V-1-AH-BN J7E090000-620-IBLK 05/04/2007 08:58	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 06/18/2007

Batch: 7129620 pCi/L
SEQ Batch, Test: None

Balance Id: 12445
Pipet #:
Sep1 DT/Tm Tech: 6-15-07 sm
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JWA581AA-SAMP Constituent List:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JWL3V1AA-BLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JWL3V1AC-LCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JWL3V1AD-MBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JWL3V1AE-MLCS:
H-3 RDL:400 pCi/L LCL:70 UCL:130 RPD:20
JWL3V1AF-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JWL3V1AG-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:
JWL3V1AH-IBLK:
H-3 RDL:400 pCi/L LCL: UCL: RPD:

JWA581AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3V1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3V1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3V1AD-MBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3V1AE-MLCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3V1AF-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3V1AG-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3V1AH-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

AnalyDueDate: 06/18/2007

Batch: 7129620 pCi/L
SEQ Batch, Test: None

Balance Id:
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech:

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Approved By _____ Date: _____

6/18/2007 4:14:19 PM

ICOC Fraction Transfer/Status Report

ByDate: 6/18/2006, 6/23/2007, Batch: '7129620', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7129620							
AC			CalcC	McDowellD	6/15/2007 8:18:27		
SC				wagarr	IsBatched	5/9/2007 4:41:37 PM	ICOC_RADCALC v4.8.26
SC				McDowellD	InSep1	6/15/2007 8:18:27 AM	RICH-RC-5007 REVISION 6
SC				McDowellD	Sep1C	6/15/2007 12:02:48 PM	RICH-RC-5007 REVISION 6
SC				StringerR	InCnt1	6/15/2007 1:10:31 PM	RICH-RD-0001 REVISION 4
SC				StringerR	CalcC	6/17/2007 12:40:51 PM	RICH-RD-0001 REVISION 4
AC				McDowellD	6/15/2007 12:02:48		
AC				McDowellD	6/15/2007 1:08:40 PM		
AC				StringerR	6/15/2007 1:10:31 PM		
AC				StringerR	6/17/2007 12:40:51		

5/9/2007 4:39:18 PM

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

AnalyDueDate: 06/18/2007 WOS178

AS H-3 Prp/SepRC5024
U3 Enriched Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12424
Pipet #:
Sep1 DT/Tm Tech: 5-25-07 [initials]
Sep2 DT/Tm Tech:
Prep Tech:

Batch: 7129621 WATER pCi/L PM, Quote: SA , 57671
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JWEP1-1-AA J7E070109-1-SAMP 05/04/2007 12:07	AmtRec: 20ML,3XLP	#Containers: 4				Scr:	Alpha:	Beta:
2 JWEP1-1-AC-X J7E070109-1-DUP 05/04/2007 12:07	AmtRec: 20ML,3XLP	#Containers: 4				Scr:	Alpha:	Beta:
3 JWL3X-1-AA-B J7E090000-621-BLK 05/04/2007 12:07	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
4 JWL3X-1-AC-C J7E090000-621-LCS 05/04/2007 12:07	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:
5 JWL3X-1-AD-BN J7E090000-621-IBLK 05/04/2007 12:07	AmtRec:	#Containers: 1				Scr:	Alpha:	Beta:

Comments:

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JWEP11AA-SAMP Constituent List:
H-3 RDL:1.00E+01 pCi/L LCL:70 UCL:130 RPD:20

Sample Preparation/Analysis

AS H-3 Prp/SepRC5024
U3 Enriched Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 12424
Pipet #:
Sep1 DT/Tm Tech: 5-25-07 Dm
Sep2 DT/Tm Tech:
Prep Tech:

AnalyDueDate: 06/18/2007

Batch: 7129621 pCi/L
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

JWL3X1AA-BLK:
H-3 RDL:1.00E+01 pCi/L LCL: UCL: RPD:
JWL3X1AC-LCS:
H-3 RDL:10 pCi/L LCL:70 UCL:130 RPD:20
JWL3X1AD-IBLK:
H-3 RDL:1.00E+01 pCi/L LCL: UCL: RPD:

JWEP11AA-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3X1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3X1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3X1AD-IBLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

ICOC Fraction Transfer/Status Report

ByDate: 6/18/2006, 6/23/2007, Batch: '7129621', User: *ALL Order By DateTimeAccepting

Q	Batch	Work Ord	CurStatus	Accepting			Comments
7129621							
AC			**CalcC**	**McDowellD**	5/14/2007 1:11:07 PM		
SC				wagarr	IsBatched	5/9/2007 4:41:37 PM	ICOC_RADCALC v4.8.26
SC				McDowellD	InPrep	5/14/2007 1:11:07 PM	RICH-RC-5024 REVISION 2
SC				McDowellD	Sep1C	6/14/2007 3:21:24 PM	RICH-RC-5024 REVISION 2
SC				DAWKINSO	InCnt1	6/14/2007 4:00:46 PM	RICH-RD-0001 REVISION 4
SC				BlackCL	CalcC	6/18/2007 8:16:56 AM	RICH-RD-0001 REVISION 4
AC				**McDowellD**	6/14/2007 3:21:24 PM		
AC				**DAWKINSO**	6/14/2007 4:00:46 PM		
AC				**BlackCL**	6/18/2007 8:16:56		

AC: Accepting Entry; SC: Status Change

6/14/2007 2:19:32 PM

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 06/18/2007 W05172

Sep1 DT/Tm Tech:

Batch: 7129616 **WATER** **ug/L**

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JWCG1-1-AD J7E040342-1-SAMP 05/03/2007 12:13	26.90g,in	AmtRec: 20ML,2X500ML,4LP	#Containers: 4	Scr:	Alpha: 4.31E-06 uCi/Sa	Beta: -9.90E-07 uCi/Sa		
2 JWCHW-1-AE J7E040342-2-SAMP 05/03/2007 09:55	25.10g,in	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5	Scr:	Alpha: 1.80E-03 uCi/Sa	Beta: -2.11E-04 uCi/Sa		
3 JWCJC-1-AE J7E040342-3-SAMP 05/03/2007 10:56	25.30g,in	AmtRec: 20ML,500ML,4XLP,4LP	#Containers: 7	Scr:	Alpha: 3.68E-03 uCi/Sa	Beta: 4.36E-04 uCi/Sa		
4 JWCJM-1-AE J7E040342-4-SAMP 05/03/2007 12:42	25.30g,in	AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5	Scr:	Alpha: 1.80E-03 uCi/Sa	Beta: 2.43E-04 uCi/Sa		
5 JWEPC-1-AF J7E070107-1-SAMP 05/04/2007 11:30	25.60g,in	AmtRec: 20ML,500ML,5XLP,4LP	#Containers: 8	Scr:	Alpha: 1.76E-03 uCi/Sa	Beta: -1.69E-03 uCi/Sa		
6 JWEPG-1-AD J7E070107-2-SAMP 05/04/2007 08:58	25.10g,in	AmtRec: 20ML,500ML,4XLP	#Containers: 6	Scr:	Alpha: -4.63E-05 uCi/Sa	Beta: 8.51E-04 uCi/Sa		
7 JWEPK-1-AD J7E070107-3-SAMP 05/04/2007 08:58	25.80g,in	AmtRec: 20ML,500ML,4XLP	#Containers: 6	Scr:	Alpha: 4.38E-04 uCi/Sa	Beta: -1.22E-04 uCi/Sa		

Sample Preparation/Analysis

Balance Id:1120482733

384868, Pacific Northwest National Laboratory , Pacific Northwest National Lab

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Pipet #: _____

AnalyDueDate: 06/18/2007

Sep1 DT/Tm Tech:

Batch: 7129616 WATER ug/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JWEPP-1-AD J7E070107-4-SAMP 05/04/2007 09:56		25.90g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: 6.02E-05 uCi/Sa	Beta: 6.57E-04 uCi/Sa
9 JWEPQ-1-AF J7E070107-5-SAMP 05/04/2007 10:36		27.00g,in AmtRec: 20ML,500ML,4XLP	#Containers: 6			Scr:	Alpha: 2.43E-04 uCi/Sa	Beta: -1.22E-04 uCi/Sa
10 JWEPW-1-AE J7E070107-6-SAMP 05/04/2007 12:20		26.40g,in AmtRec: 20ML,2X500ML,LP,4LP	#Containers: 5			Scr:	Alpha: 4.40E-03 uCi/Sa 2.5E-01L	Beta: 6.20E-04 uCi/Sa
11 JWEP5-1-AD J7E070109-2-SAMP 05/04/2007 10:36		27.90g,in AmtRec: 20ML,500MLP,LP	#Containers: 3			Scr:	Alpha: 3.90E-07 uCi/Sa	Beta: 1.22E-04 uCi/Sa
12 JWEP5-1-AE-S J7E070109-2-MS 05/04/2007 10:36		25.60g,in UNSF3765 06/14/07,pd 01/23/07,r AmtRec: 20ML,500MLP,LP	#Containers: 3			Scr:	Alpha: 3.90E-07 uCi/Sa	Beta: 1.22E-04 uCi/Sa
13 JWEP6-1-AD J7E070109-3-SAMP 05/04/2007 11:23		25.40g,in AmtRec: 20ML,500MLP,LP	#Containers: 3			Scr:	Alpha: 1.98E-04 uCi/Sa	Beta: 5.67E-05 uCi/Sa
14 JWEP8-1-AD J7E070109-4-SAMP 05/04/2007 11:23		27.60g,in AmtRec: 20ML,500MLP,LP	#Containers: 3			Scr:	Alpha: 1.02E-05 uCi/Sa	Beta: 1.70E-04 uCi/Sa

Sample Preparation/Analysis

384868, Pacific Northwest National Laboratory , Pacific Northwest National Lab

AnalyDueDate: 06/18/2007

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Batch: 7129616 WATER ug/L
SEQ Batch, Test: None

PM, Quote: SA , 57671

Balance Id:1120482733
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 JWH50-1-AD J7E080313-1-SAMP 05/07/2007 09:36		25.60g,in AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: 9.72E-04 uCi/Sa	Beta: -2.42E-04 uCi/Sa
16 JWH50-1-AE-X J7E080313-1-DUP 05/07/2007 09:36		25.10g,in AmtRec: 20ML,500ML,LP,2X4LP	#Containers: 5			Scr:	Alpha: 9.72E-04 uCi/Sa	Beta: -2.42E-04 uCi/Sa
17 JWL3N-1-AA-B J7E090000-616-BLK 05/07/2007 09:36		26.00g,in AmtRec:	#Containers: 1			Scr:	Alpha:	Beta:
18 JWL3N-1-AC-C J7E090000-616-LCS 05/07/2007 09:36		26.00g,in AmtRec:	UNSF3766 06/14/07,pd 01/23/07,r #Containers: 1			Scr:	Alpha:	Beta:
19 JWL3N-1-AD-C J7E090000-616-LCS 05/07/2007 09:36		25.50g,in AmtRec:	UNSC1702 05/17/07,pd 04/28/06,r #Containers: 1			Scr:	Alpha:	Beta:

Comments: ~~JWEPQ-SAMP Comments~~ PH<2.0 gb 6-14-07

All Clients for Batch:
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671

JWCG11AD-SAMP Constituent List:

Sample Preparation/Analysis

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
5I CLIENT: HANFORD

Balance Id:1120482733
Pipet #: _____
Sep1 DT/Tm Tech:
Sep2 DT/Tm Tech:
Prep Tech: ,BockJ

AnalyDueDate: 06/18/2007

Batch: 7129616 **ug/L**
SEQ Batch, Test: None

Work Order, Lot, Sample DateTime	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On | Off (24hr) Circle	CR Analyst, Init/Date	Comments:

Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
JWEP51AE-MS:

JWL3N1AA-BLK:
Uranium RDL:1.44E-01 ug/L LCL: UCL: RPD:
JWL3N1AC-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20
JWL3N1AD-LCS:
Uranium RDL:0.144343 ug/L LCL:70 UCL:130 RPD:20

JWCG11AD-SAMP Calc Info:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWEP51AE-MS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3N1AA-BLK:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3N1AC-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B
JWL3N1AD-LCS:
Uncert Level (#s).: 2 Decay to SaDt: Y Blk Subt.: N Sci.Not.: Y ODRs: B

Approved By _____ Date: _____

6/20/2007 10:50:54 AM

ICOC Fraction Transfer/Status Report

ByDate: 6/20/2006, 6/25/2007, Batch: '7129616', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting			Comments
7129616						
AC		Cnt1C	BockJ	6/14/2007 2:08:40 PM		
SC			wagarr	IsBatched	5/9/2007 4:41:37 PM	ICOC_RADCALC v4.8.26
SC			BockJ	InPrep	6/14/2007 2:08:40 PM	RICH-RC-5014 Revision 7
SC			BockJ	Prep1C	6/14/2007 2:19:39 PM	RICH-RC-5015 REVISION 6
SC			AshworthA	InPrep2	6/18/2007 8:48:42 AM	RICH-RC-5015 REVISION 6
SC			AshworthA	Prep2C	6/19/2007 10:06:05 AM	RICH-RC-5015 REVISION 6
SC			NelsonT	Cnt1C	6/19/2007 3:18:03 PM	RICH-RC-5058 REV 7
AC			BockJ	6/14/2007 2:19:39 PM		
AC			AshworthA	6/18/2007 8:48:42		
AC			AshworthA	6/19/2007 10:06:05		
AC			NelsonT	6/19/2007 3:18:03 PM		

AC: Accepting Entry; SC: Status Change